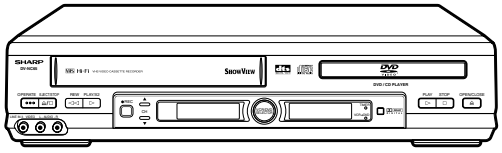
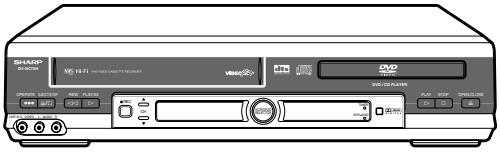
SHARP SERVICE MANUAL

S92P3DV-NC65H



DV-NC65H
DV-NC65S



DV-NC70H

VCR/DVD COMBINATION MODEL

MODELS DV-NC65H DV-NC65S DV-NC70H

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

CONTENTS

SHARP CORPORATION

1. IMPORTANT SERVICE NOTES

Note:
This unit can be used only where the power supply is AC 230V-240V, 50Hz. It cannot be used elsewhere.

CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT STARE INTO THE LASER BEAM OR VIEW WITH OPTICAL INSTRUMENT.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

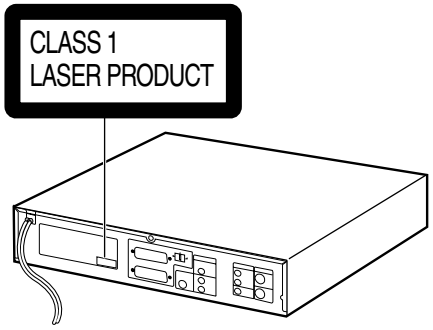
Laser Diode Properties
Material: AlGaInP
Wave length: 650 nm
Emission Duration: Continuous
Laser output: Max. 0.7 mW

Power Lead Protection

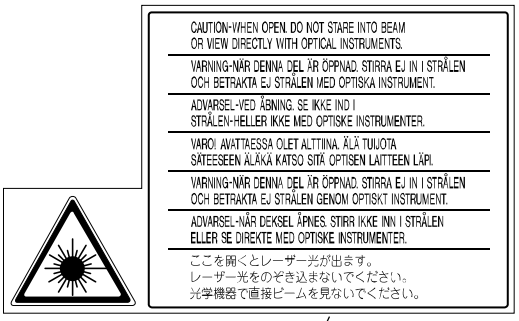
To avoid any malfunctions of the unit, and to protect against electric shock, fire or personal injury, please observe the following.

- Hold the plug firmly when connecting or disconnecting the AC power lead.
- Keep the AC power lead away from heating appliances.
- Never put any heavy object on the AC power lead.
- Do not attempt to repair or reconstruct the AC power lead in any way.

- This Unit is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT label is located on the rear cover.
- This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.



(Rear of product)



VARO! AVATTAESSA OLET ALTTIINA LASERSÄTEILYLLE.
ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.

VARNING - LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD.
STIRRA EJ IN STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

2. FEATURES

■ **Common Features**
- A DVD, CD player and VCR all in one.
- Simultaneous VCR recording and DVD playback.

■ **VCR**
- VHS Hi-Fi Stereo Sound/Double-Azimuth 4-Heads
- 1 minute Rewind (E-180)
- S-VHS Simple Playback
- HQ (High Quality) Circuitry
- Simple Recording Timer
- Sharp Super Picture

■ **DVD**
- Plays DVD, CD (Digital Audio) discs as well as CD-R/CD-RW discs recorded in MP3 file format
- 3D Virtual Surround provides high-quality surround sound
- Digital Gamma correction
- Dolby Digital*1/DTS*2, MPEG Audio digital out capability
- High-quality digital images
- High-quality digital sound

*1 Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.
*2 "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

3. SPECIFICATIONS

Signal System	PAL (DV-NC65H/70H) PAL/MESECAM (DV-NC65S)
INPUT/OUTPUT JACKS	
DVD/VCR shared output jacks	VIDEO jack: RCA Pin-jack AUDIO jack: RCA Pin-jack
DVD output jacks	VIDEO jack: S-Video jack AUDIO jack: RCA Pin-jack DIGITAL AUDIO IF: Coaxial digital (DV-NC65H/S) : Coaxial digital and Optical digital (DV-NC70H) AUDIO output jack: RCA Pin-jack
VIDEO input jacks	VIDEO jack: SCART AUDIO jack: SCART VIDEO jack: RCA Pin-jack AUDIO jack: RCA Pin-jack
VCR	
Video Recording System	Rotary Two-Head Helical Scanning
Number of Video Heads	4
Video Signal Standard	PAL Colour System (DV-NC65H/70H) PAL/MESECAM Colour System (DV-NC65S)
Audio Recording System	1 Stationary Head for Linear Audio 2 Rotary Heads for Hi-Fi stereo
Tape Width	12.7 mm
Tape Speed (PAL)	(SP) 23.39 mm/sec. (LP) 11.7 mm/sec. (EP) 7.8 mm/sec.
(NTSC)	(SP) 33.35 mm/sec. (Playback only) (LP) 16.67 mm/sec. (Playback only) (EP) 11.12 mm/sec. (Playback only)
Recording/Playback Time	(SP) 240 min. (With E-240 Cassette) (LP) 480 min. (With E-240 Cassette) (EP) 720 min. (With E-240 Cassette)

Channel Coverage	UHF E21-E69 (DV-NC65H/70H) VHF E2-E12 + S1-S41; UHF E21-E69 (DV-NC65S)
Antenna Input	75Ω
Video Input	Input level: 0.5 to 2.0 Vp-p (75Ω)
Video Output	Output level: 1.0 Vp-p (75Ω)
Audio Output (0 dBs = 0.775 Vrms)	Input level: –3.8 dBs (47kΩ)
Audio Output (0 dBs = 0.775 Vrms)	Output level: –3.8 dBs (1kΩ)
Hi-Fi Audio	Dynamic Range: 90 dB Frequency Response: 20 Hz-20 kHz
Memory Backup	10 minutes

DVD

DVD/VCR shared Video output	Output level: 1 Vp-p (75Ω)
S video output	Y output level: 1 Vp-p (75Ω) C output level: 0.3 Vp-p (75Ω)
Audio output	Output level: 2 Vrms (1 kHz, 0 dB)
Video signal horizontal resolution	500 lines (450 lines min.)
S/N ratio	60 dB (50 db min.)
Audio signal frequency characteristics	For DVD linear PCM playback: 4 Hz to 22 kHz (48 kHz sampling) CD playback: 4 Hz to 20 kHz (JEITA)
S/N ratio	CD: 96 dB, 1 kHz (JEITA)
Dynamic range	DVD linear PCM: 96 dB (JEITA) CD: 96 dB (JEITA)
Total harmonic distortion ratio	CD: 0.006% (JEITA)
Pickup	Wave length: 650 nm (DVD) / 780nm (CD) Laser output: Max. 0.7 mW

Operating temperature	5 °C to 35 °C (41 °F to 95 °F)
Storage temperature	–20 °C to 55 °C (–4 °F to 131 °F)
Power supply	230 V-240 V AC, 50 Hz
Power consumption	21 W
Dimensions	W × H × D: 430 mm × 93.5 mm × 350 mm (DV-NC65H/S) W × H × D: 430 mm × 93.5 mm × 356 mm (DV-NC70H)
Weight	5.3 kg

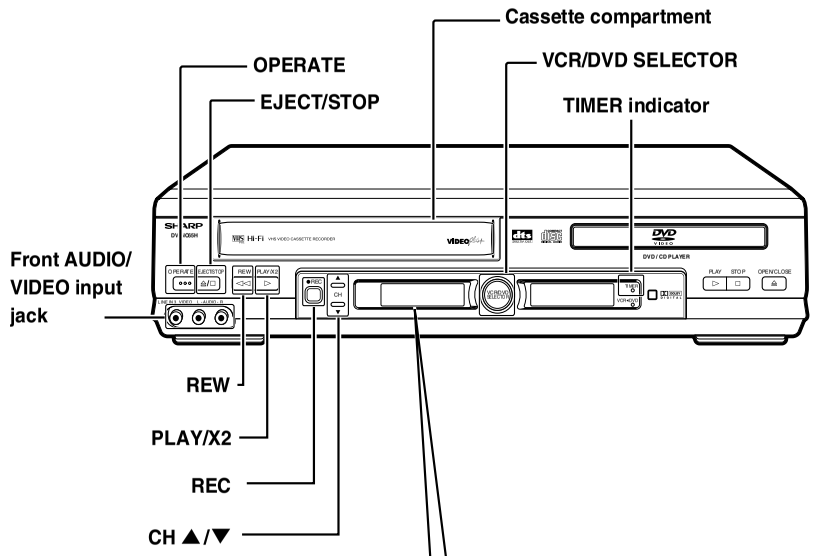
Specifications are subject to change without notice.
Weight and dimensions are approximate.

3-1. ACCESSORIES

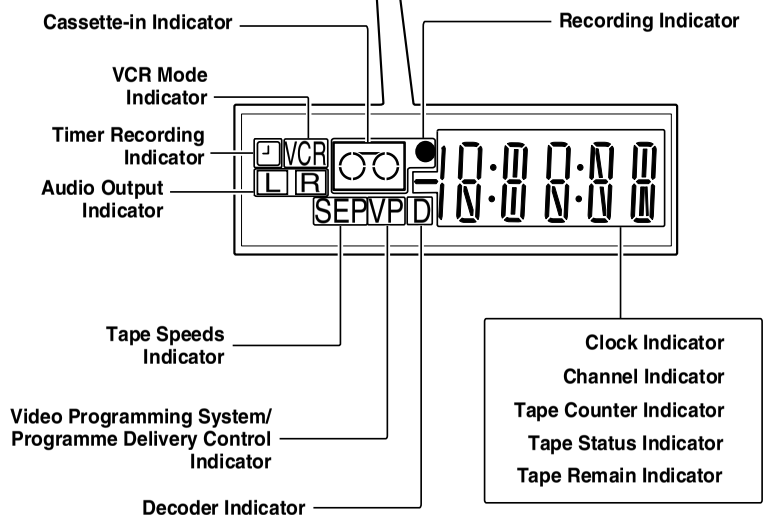
Accessories: Remote control unit × 1, "AA" size battery (R-6, UM/SUM-3) × 2,
AV cable × 1, RF cable (75 Ohm, 1 m) × 1

DV-NC65H (Front)

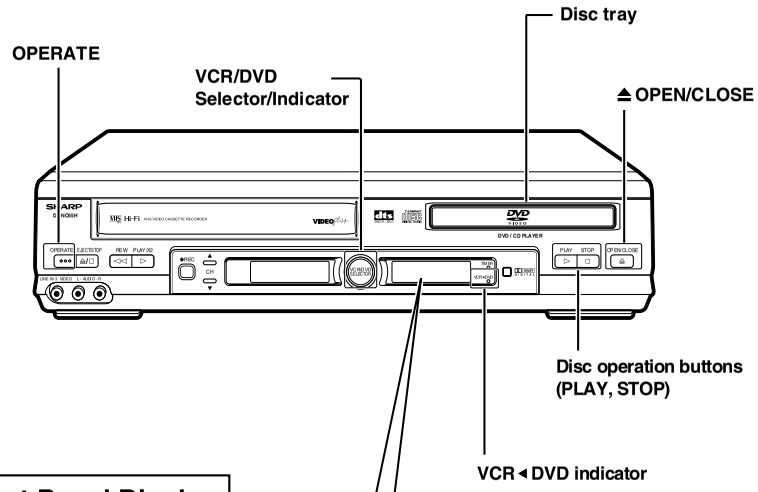
VCR Main Unit (Front)



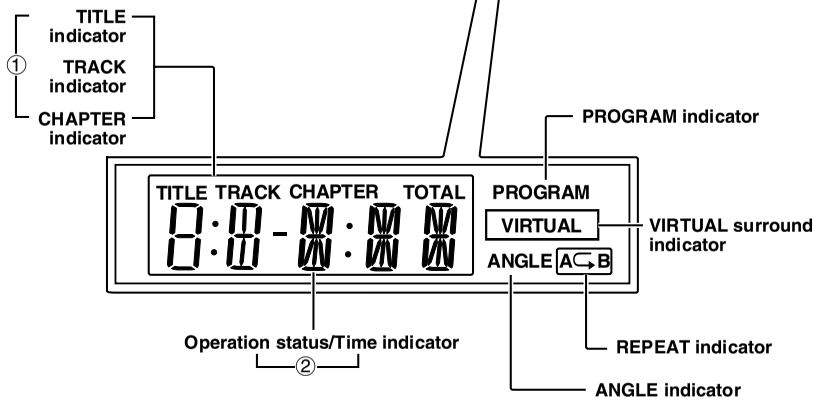
VCR Front Panel Display



DVD Main Unit (Front)



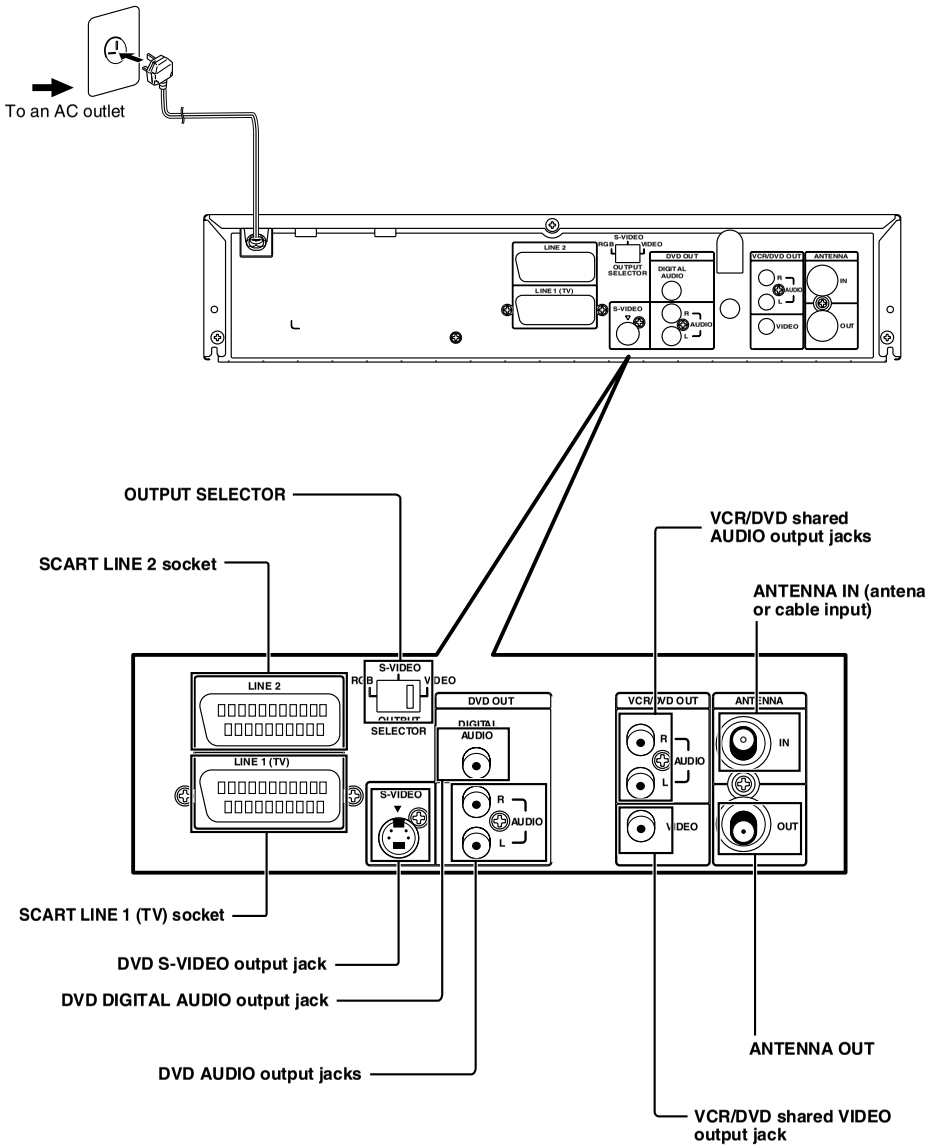
DVD Front Panel Display



You can toggle between ① and ② by pressing the remote control unit's **DISPLAY** button.

DV-NC65H (Rear)

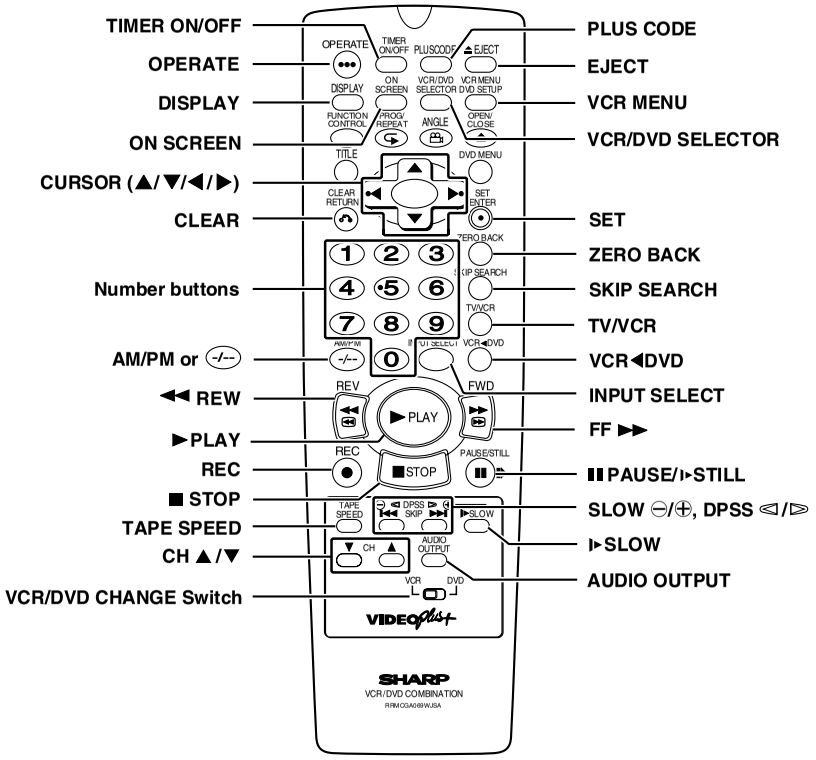
Main Unit (Rear)



DV-NC65H (Remote Control)

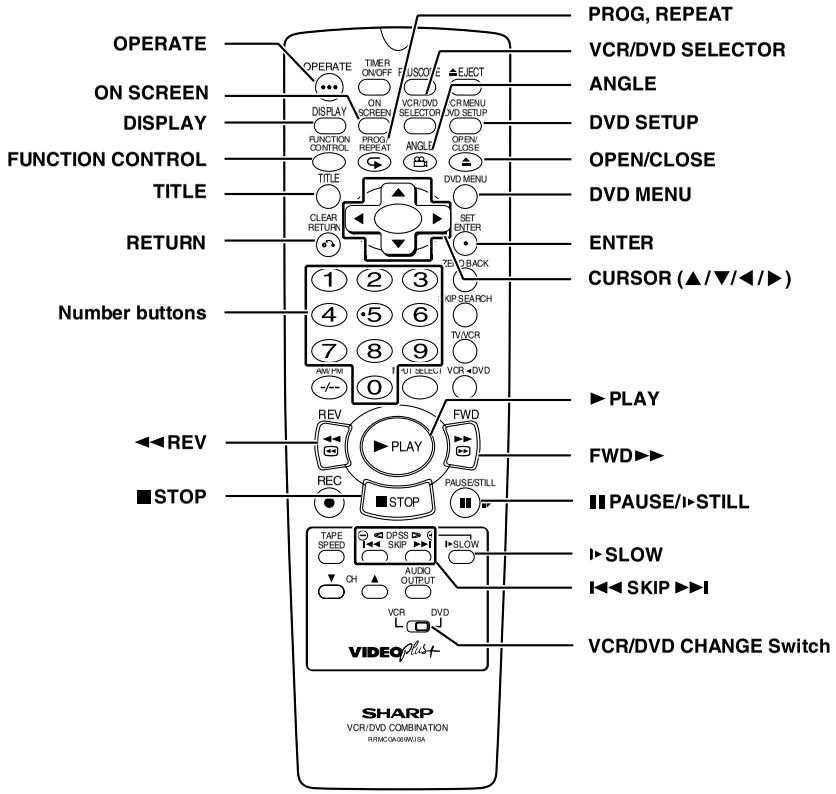
Remote (VCR Operation Buttons)

- The explanations on this page use the **VCR/DVD CHANGE Switch** in the **VCR** position.



Remote (DVD Operation Buttons)

- The explanations on this page use the **VCR/DVD CHANGE Switch** in the **DVD** position.

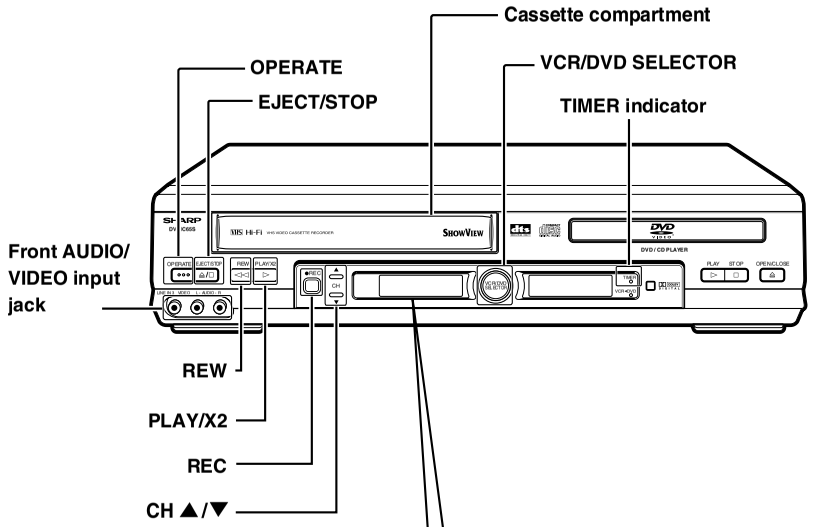


NOTE

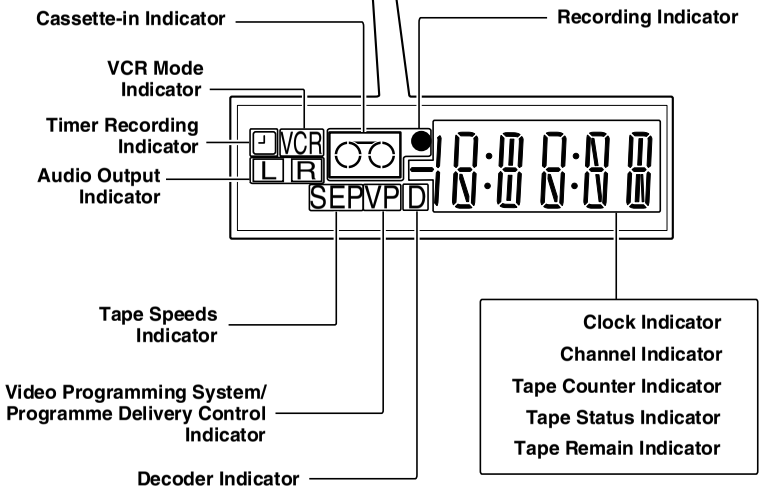
- Do not subject the Remote to shock, water or excessive humidity.
- The Remote may not function if the Unit sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if you do not use the Remote for an extended period of time.

DV-NC65S (Front)

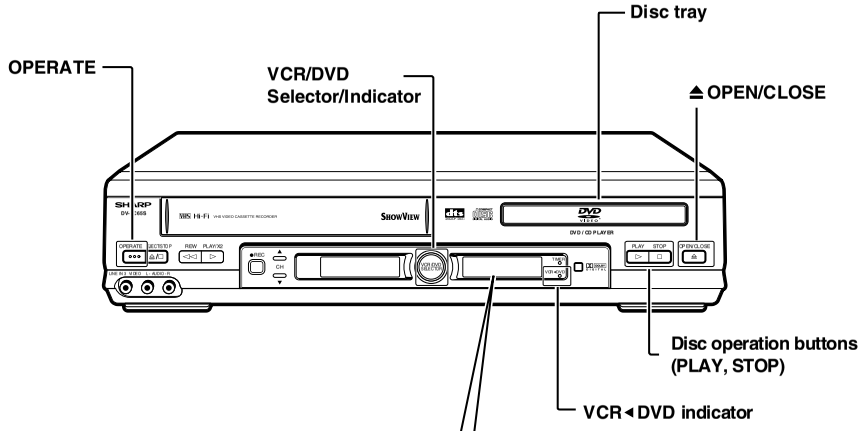
VCR Main Unit (Front)



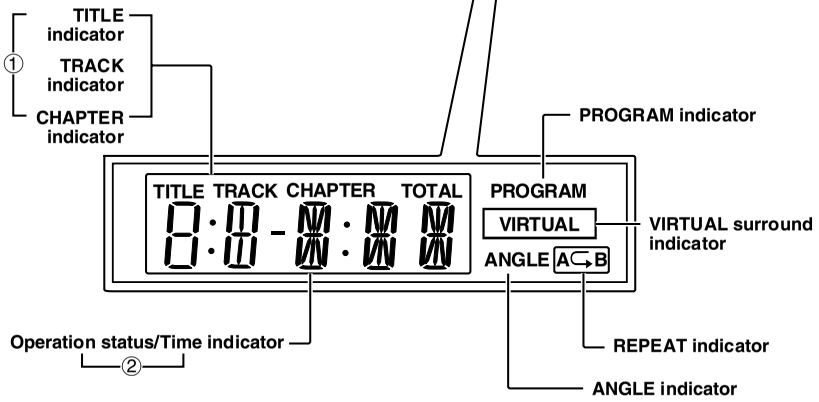
VCR Front Panel Display



DVD Main Unit (Front)



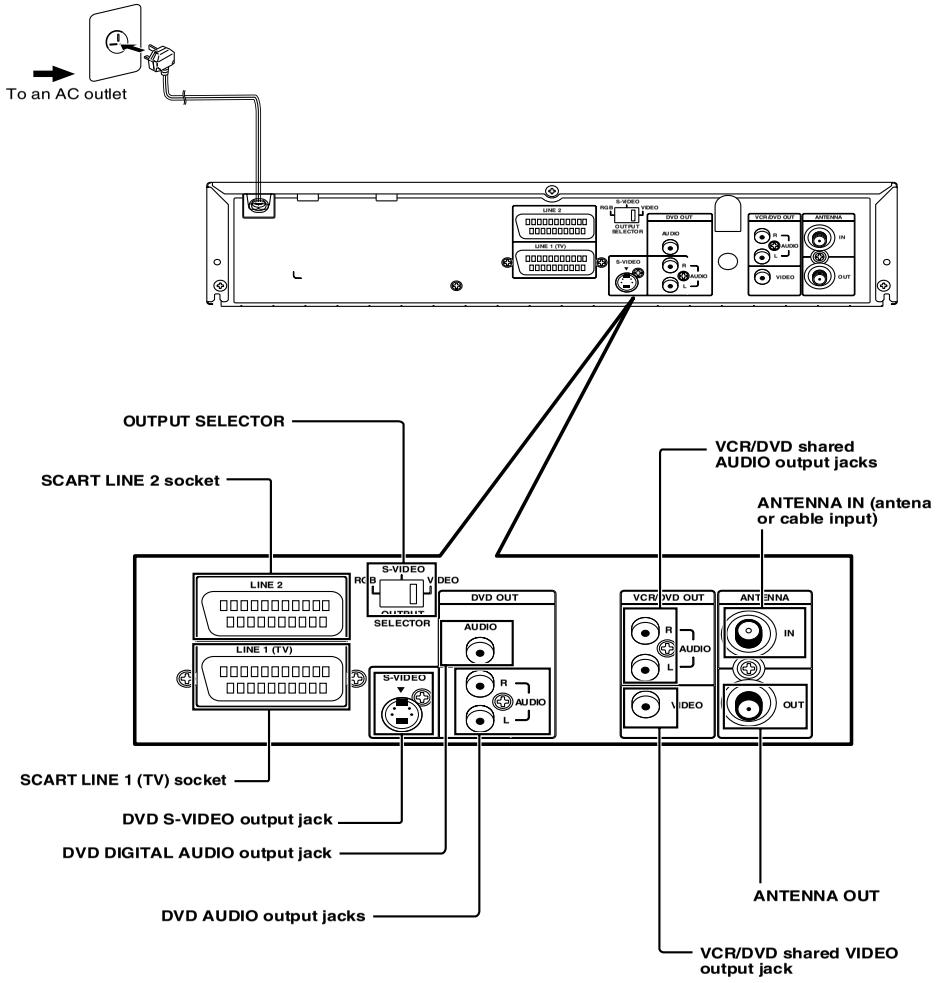
DVD Front Panel Display



You can toggle between ① and ② by pressing the remote control unit's **DISPLAY** button.

DV-NC65S (Rear)

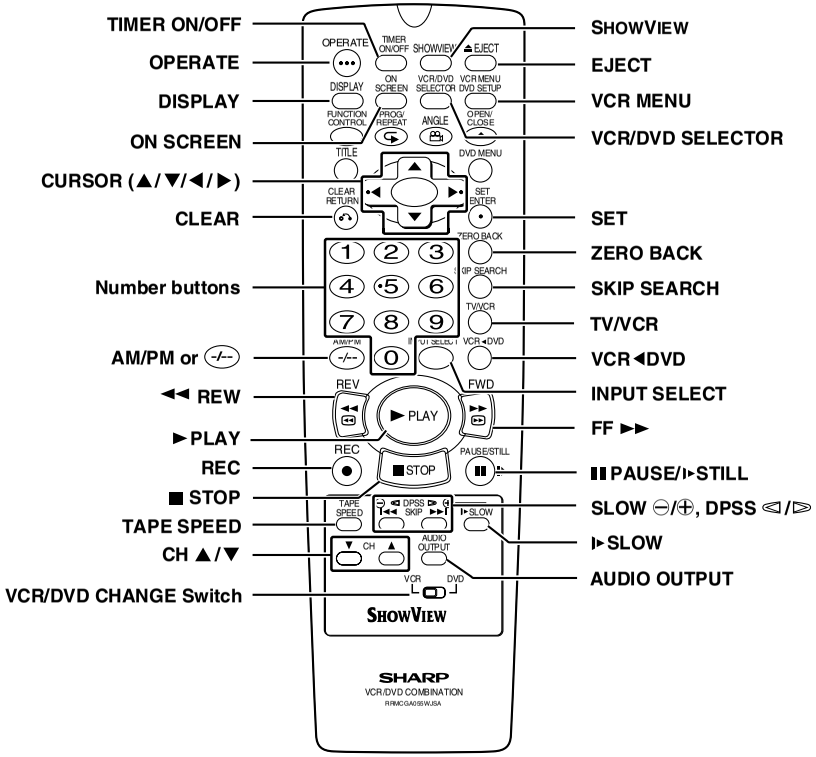
Main Unit (Rear)



DV-NC65S (Remote Control)

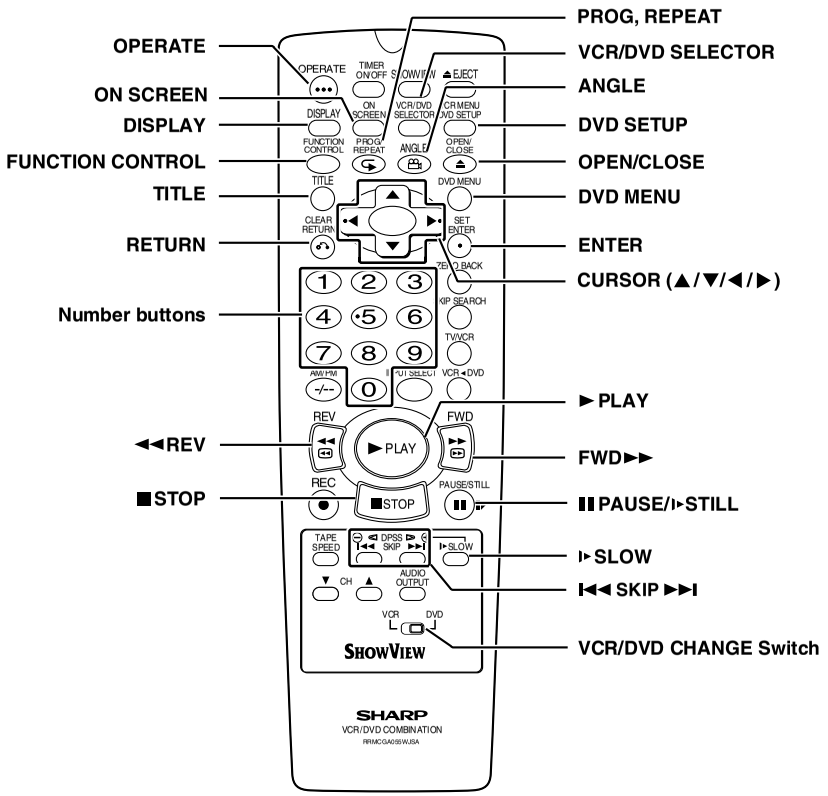
Remote (VCR Operation Buttons)

- The explanations on this page use the **VCR/DVD CHANGE Switch** in the **VCR** position.



Remote (DVD Operation Buttons)

- The explanations on this page use the **VCR/DVD CHANGE Switch** in the **DVD** position.

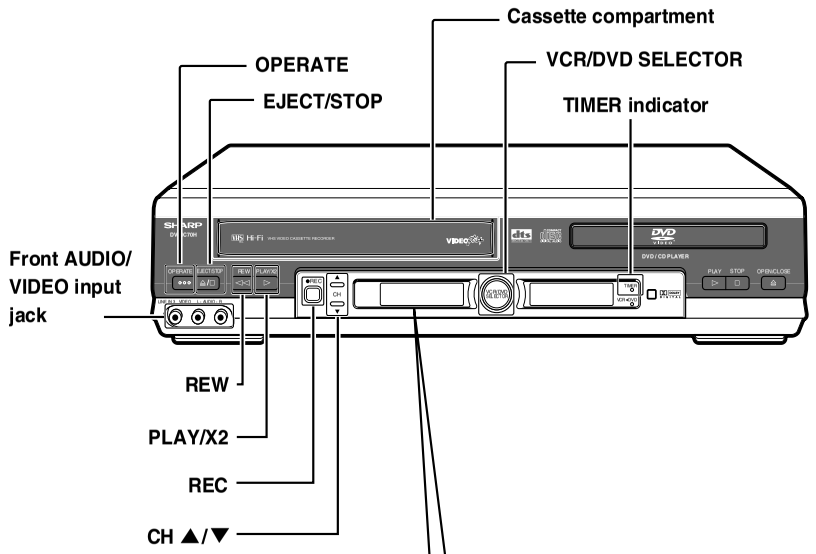


NOTE

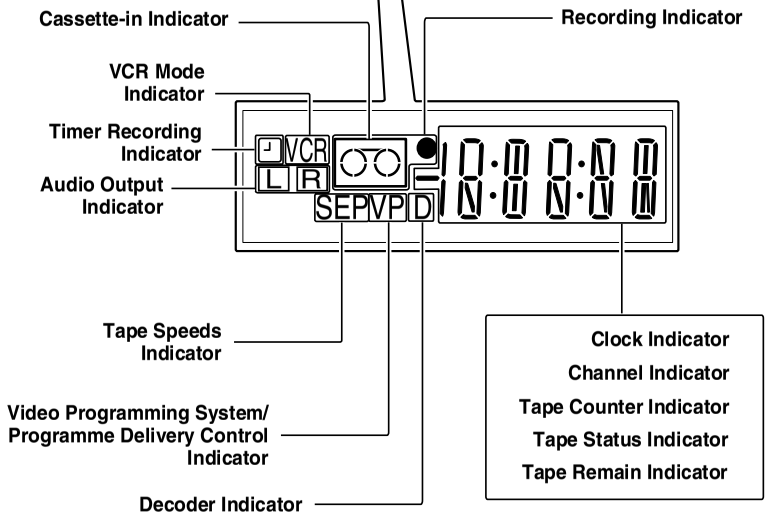
- Do not subject the Remote to shock, water or excessive humidity.
- The Remote may not function if the Unit sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if you do not use the Remote for an extended period of time.

DV-NC70H (Front)

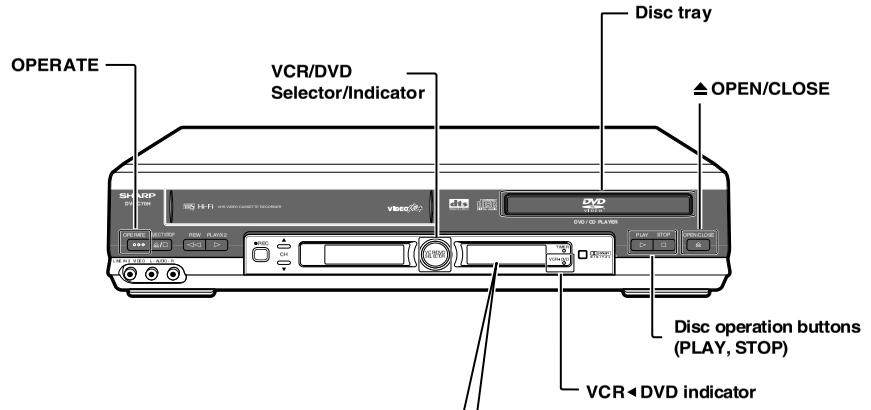
VCR Main Unit (Front)



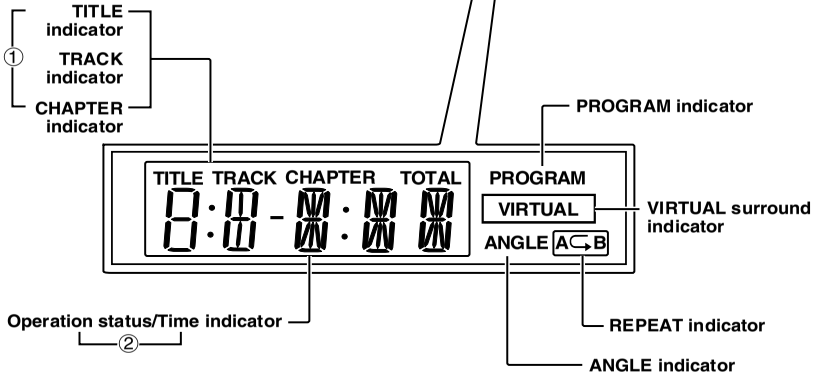
VCR Front Panel Display



DVD Main Unit (Front)



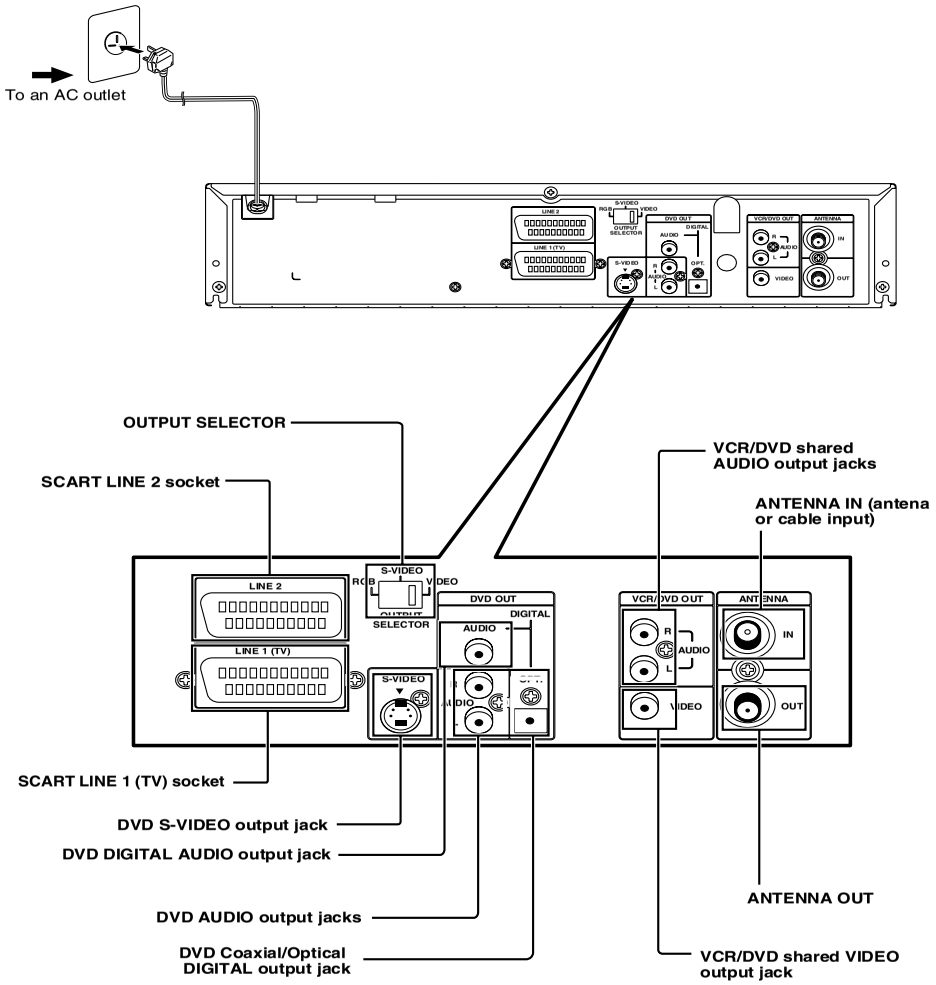
DVD Front Panel Display



You can toggle between ① and ② by pressing the remote control unit's **DISPLAY** button.

DV-NC70H (Rear)

Main Unit (Rear)



DV-NC70H (Remote Control)

Remote (VCR Operation Buttons)

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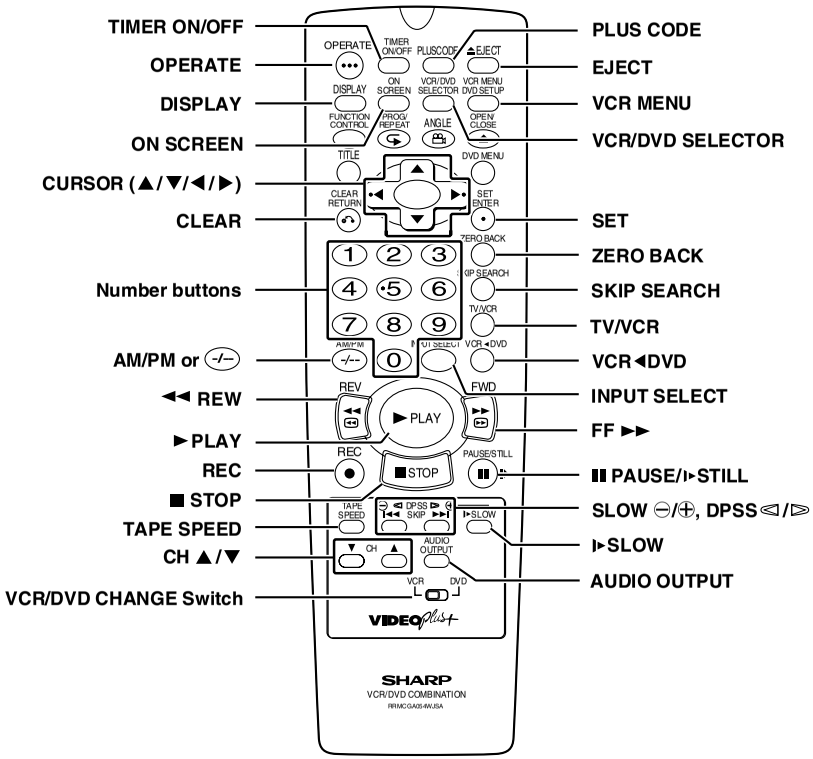

Remote (DVD Operation Buttons)

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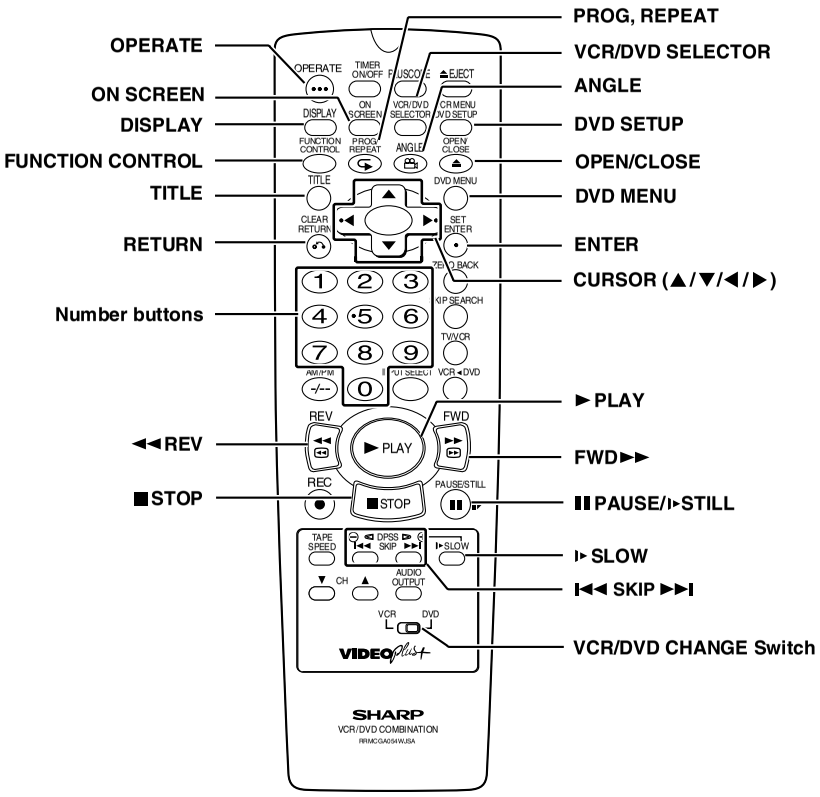

NOTE

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- The Remote may not function if the Unit sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if you do not use the Remote for an extended period of time.

5. MAINTENANCE CHECK ITEMS AND EXECUTION TIME

MECHANICAL PARTS REGUIRING PERIODICAL INSPECTION

Use the following table as a guide to maintain the mechanical parts in good operating condition.

Parts \ Maintained	1,000 hrs.	2,000 hrs.
Pickup	◯	◯
Spindle Unit	□	◯
Sled Motor		◯
Loading Motor		◯
Belt	□	◯

Note ◯ : Part Replacement
□ : Cleaning
(For cleaning, use a lint-free cloth danpened with pure isopropyl alcohol.)

CARES WHEN USING THE PICKUP

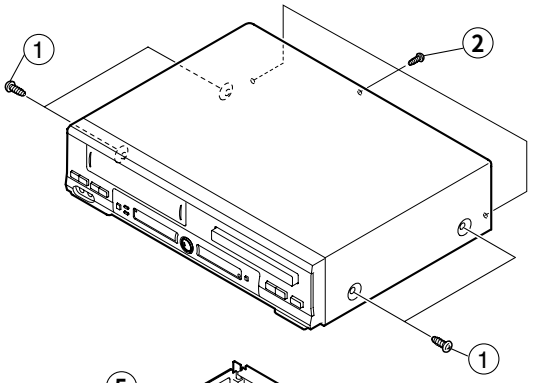
1. The laser light having wavelength 650 nm is emitted from the objective lens. BE CAREFUL SO THAT THE LASER LIGHT DOES NOT ENTER DIRECTLY INTO YOUR EYE.
2. The semiconductor laser may be easily damaged by electrostatic charges. When handling the pickup, take care so that the electrostatic charge is not generated.
3. The semiconductor laser may be easily damaged by overcurrent. Use the power supply unit which does not give any spike current when the power is turned on and off.
4. Carefully remove the dust and dirt from the objective lens with the lens blower.
   When handling the objective lens, take due care so that it is not contaminated with fingerprint, etc. If the objective lens is contaminated, impregnate the cleaning paper with a small quantity of solvent (isopropyl alcohol), and gently wipe to clean.
5. The ozone layer depleting components (ODC) are not used in the production process for the product.

6. DISASSEMBLY METHOD

6-1. DISASSEMBLY METHOD

1) Removing the top cabinet.

(1) Remove the four screws ① and the three screws ②.



2) Removing the front panel.

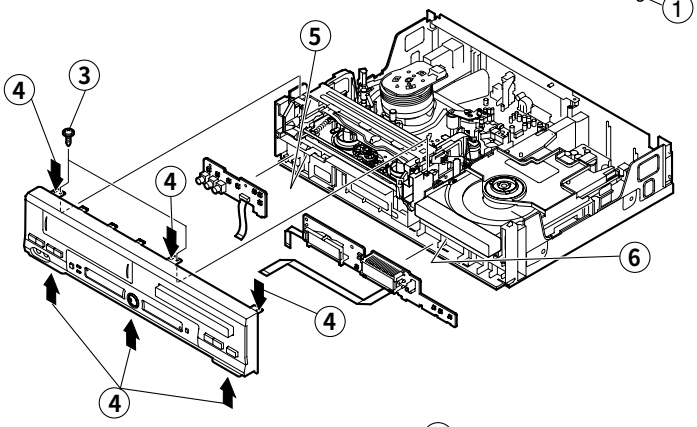
(1) Remove the two screws ③.

(2) Release the six hooks ④.

3) Removing the front PWB.

(1) Release the one hook ⑤ and tilt the PWB toward you to remove it.

(2) Release the one hook ⑥ and tilt the PWB toward you to remove it.



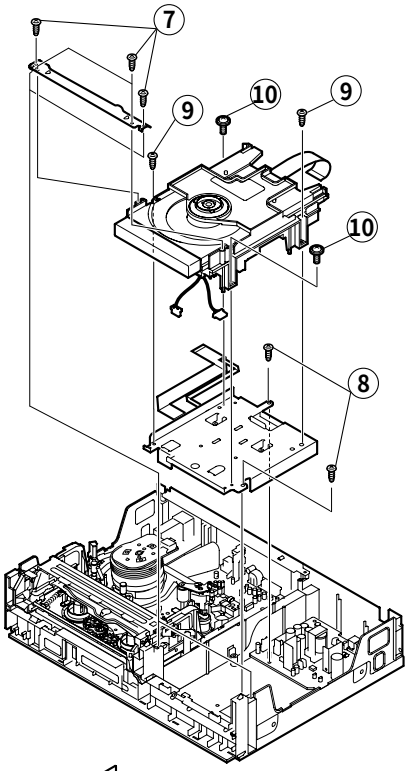
4) Removing the DVD mechanism.

(1) Remove the four screws ⑦ to remove the DVD REINF. angle.

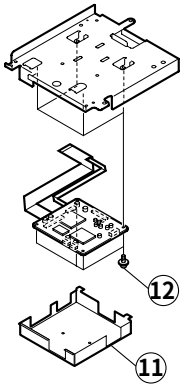
(2) Remove the two screws ⑧ and the two screws ⑨.

(3) Remove the two screws ⑩ to remove the angle (DVD) .

(4) Remove the DVD shield (lower) ⑪.



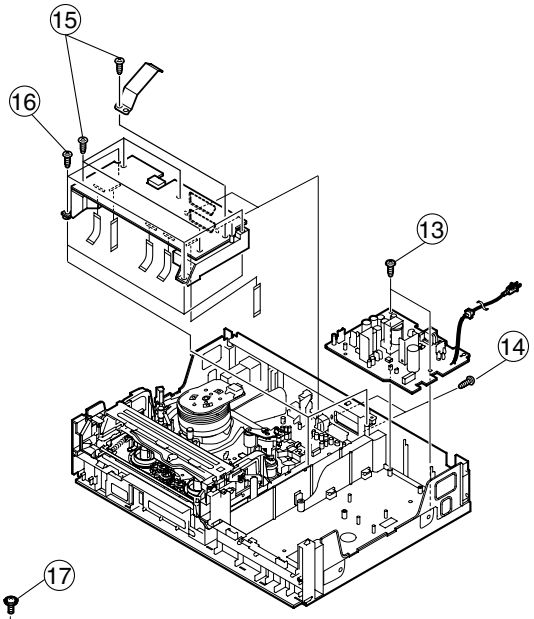
(5) Remove the four screws ⑫ to remove the DVD main PWB unit from the angle (DVD).



(6) Remove the two screws ⑬ to remove the power PWB unit.

5) Removing the rear PWB unit.

(1) Remove the two screws ⑭ (for 21 pin) at rear side.
(2) Remove the five screws ⑮ to remove the rear PWB unit and the earth plate.
(3) Remove the five connectors of the FFCs.
(4) Remove the rear PWB unit.
(5) Remove the four screws ⑯ to remove the rear PWB holder.

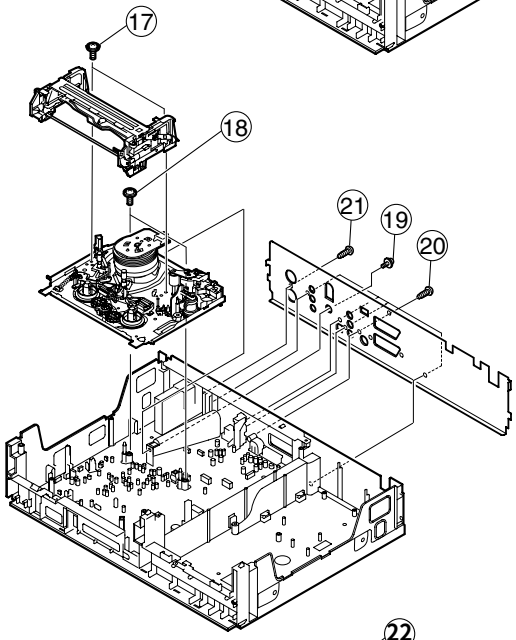


6) Removing the cassette housing control/ the VCR mechanism.

(1) Remove the two screws ⑰.
(2) Remove the two screws ⑱.
(3) Remove the one screw ⑲.

7) Removing the rear panel/ the antenna terminal cover/ the VCR main PWB unit.

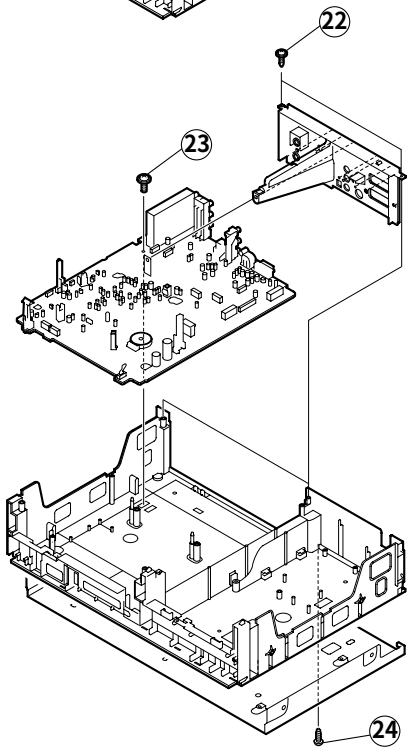
(1) Remove the five screws ⑳ at rear side.
(four screws in DV-NC65H/S)
(2) Remove the one screw ㉑ for Tuner.
(3) Remove the rear panel.
(4) Remove the two screws ㉒.



(5) Remove the antenna terminal cover.
(6) Remove the one screw ㉓.
(7) Remove the VCR main PWB unit.

8) Removing the bottom plate.

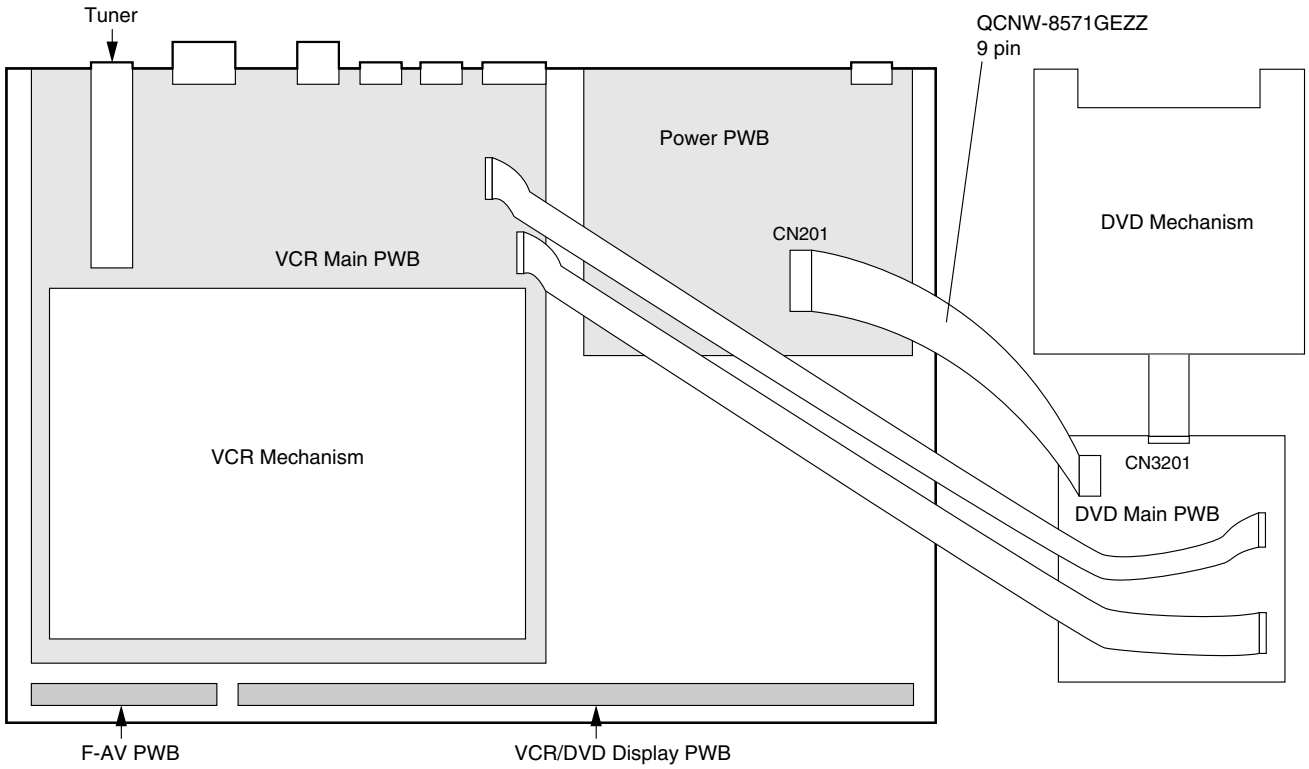
(1) Remove the one screw ㉔.



6-2. EXTENSION CABLE USE POINT (ONE PLACE)

Parts Code	Price Code	Name/Description
QCNW-8571GEZZ	AN	Extension cable (wire), 9pin 500mm DVD Main CN3201–Power CN201

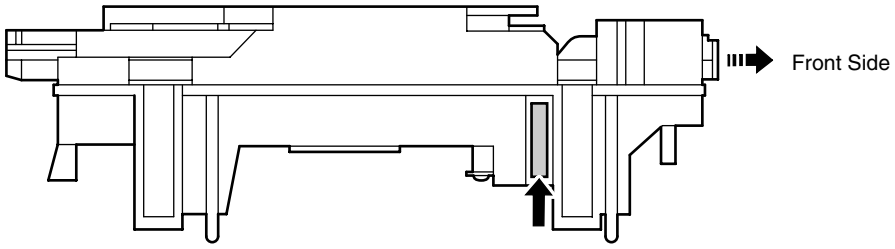
Extension Cable Diagram



6-3. REPLACEMENT OF MAIN PARTS

<Take out disk>

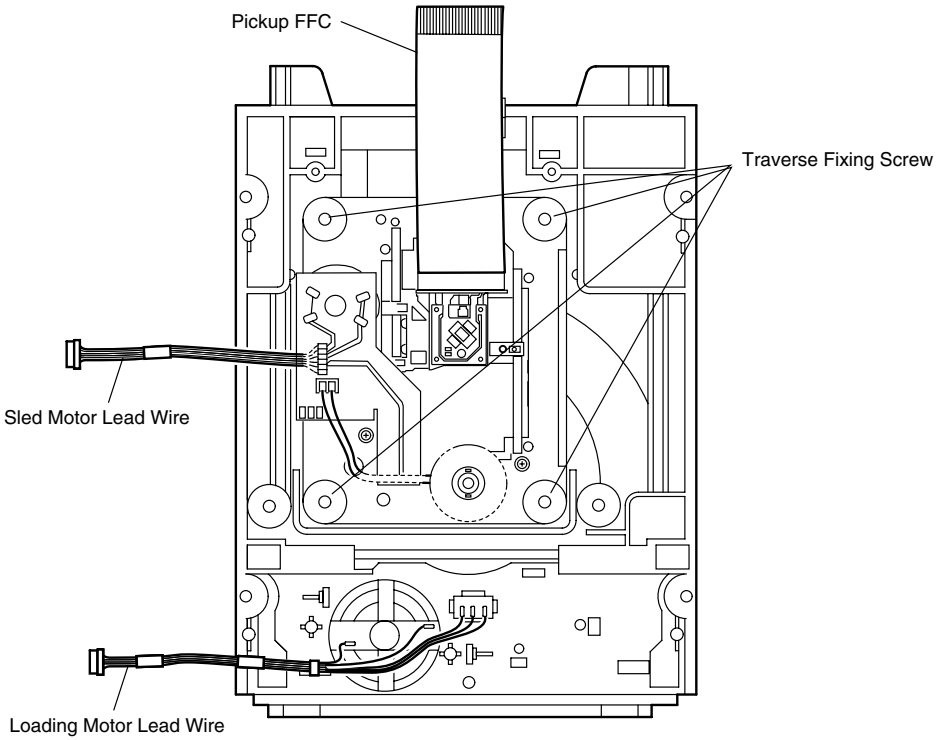
1. Remove the mechanism with angle from the set. (refer to (33) on page 130. Remove K, M, N)
2. It is in such cases as the thin driver, and it is pushed in slowly, and a tray is drawn in the arrow direction the Slide Rack on the left of the base chassis.
3. Take out disk.



<Disassembling and assembling the mechanism chassis>

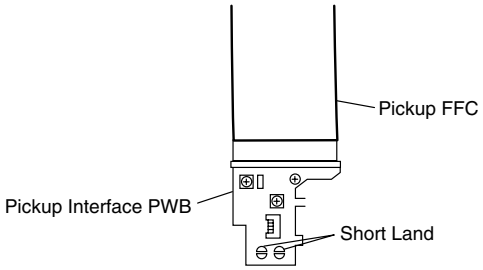
1. After setting the mechanism chassis to the angle state, ground it to prevent the electrostatic discharge damage of the pickup.
2. Remove the DVD Shield (lower) (40) (refer to the illustration on page 130).
3. Remove P, Q from the DVD Main PWB Unit (27). (Pickup Relay FFC (58) isn't removed.) (refer to the illustration on page 130)
4. Remove screws fixing the base chassis (located at the back right and at front left when facing the set).
5. With the Pickup FFC connected, turn over the base chassis and short (solder) two short lands on the pickup interface PWB in order to prevent the electrostatic discharge damage of the pickup.
6. Remove the Pickup FFC from the Main PWB.
7. Remove the Pickup FFC from the Pickup Interface PWB.
8. Remove the Traverse Fixing Screws to remove the Traverse Chassis ass'y.

Note: After assembling and wiring, remove the solder joint of the short land. If short-circuited, a disk is not played back.



<Replacing the Pickup and the Spindle Motor>

Since the Pickup optical axis and turntable inclination of DVD are adjusted with higher accuracy, make a replacement as a mechanism service chassis ass'y.

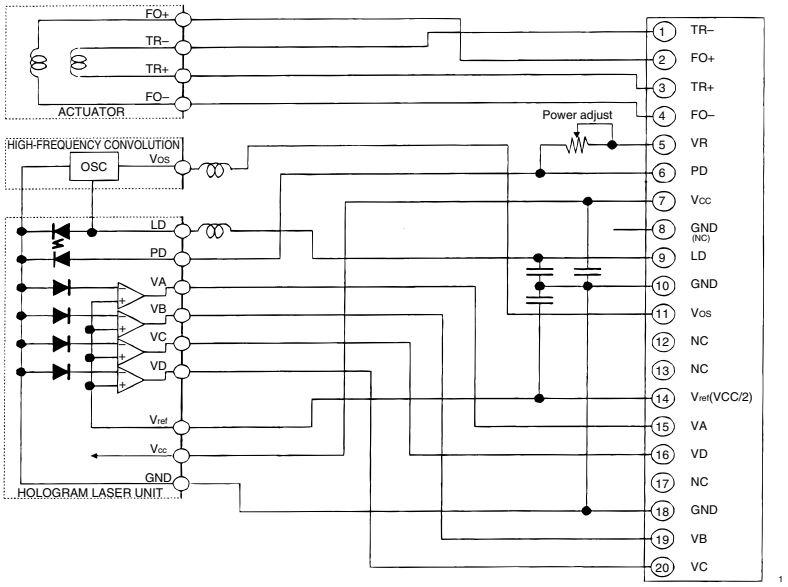


7. OPERATION OF PICKUP

7-1. CIRCUIT CONFIGURATION OF PICKUP

The pickup unit reads signals from the disk, and the flexible cable is connected to the board. The following signals flow through the cable.

7-2. EQUIVALENT CIRCUIT OF PICKUP



7-3. POLARITIES OF SIGNAL

Focus FO+, FO-	When electric current is flowed from FO+ to FO-, the lens comes to near the disk.
Tracking TR+, TR-	When electric current is flowed from TR+ to TR-, the lens goes toward the outer circumference.

7-4. SIGNALS OF PICKUP

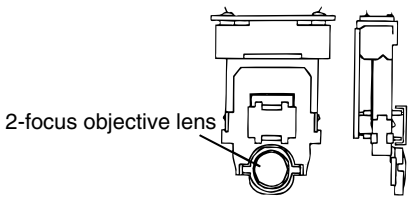
7-4-1. Tracking drive signal (TR+, TR-)

The signal drives the tracking servo mechanism which projects the beam on the track by moving the objective lens (OL) to the outer or inner circumference (at a right angle against the track) of the disk.

7-4-2. Focus drive signal (FO+, FO-)

The signal drives the focus servo mechanism which aligns the focus on the pit of the disk by elevating OL (vertically against the disk surface.)

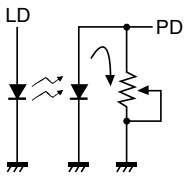
The VR terminal is connected to GND.



Actuator assembly

7-4-3. Monitor Diode (PD)

Since the laser diode largely varies output of the laser light even if the flowing current is slightly varied, the projection light is detected with the monitor diode to control the laser light to be equally output.
Since the current varies on the monitor diode according to the intensity of the received light of the laser diode, the drive current of the laser diode is reduced if the current of the monitor diode increases. On the contrary, the drive current of the laser diode is increased if the current of the monitor diode decreases.
As the projection light of the laser diode becomes stronger, the current of the monitor diode increases to increase the current which flows into the monitor diode output (PD). This is input to the pin 44 of IC301 and is compared with the reference voltage to control the drive current of the laser diode.
The circuit is called ALPC (Automatic Laser Power Control).



When the quantity of laser light increases, the current shown in figure increases and the PD terminal voltage rises.
IC301 is used to control. The LD terminal voltage lowers, and the quantity of light reduces. (IC301 is actuated by voltage input.)

7-4-4. Laser diode drive current control (LD)

Power supply to drive the laser diode

7-4-5. High-frequency convolution module power supply (VOSC)

The high-frequency convolution imposes the high-frequency signal on the DC current to impose the high frequency on the drive current of the laser. Thus, the interference of outgoing light and reflected light is prevented.

7-4-6. HF Signal (VA, VB, VC, VD)

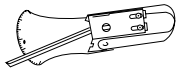
Signals recorded in the disk

8. ADJUSTMENT, REPLACEMENT AND ASSEMBLY OF MECHANICAL UNITS

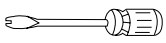
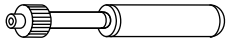
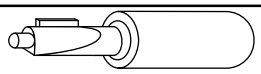
The explanation given below relates to the on-site general service (field service) but it does not relates to the adjustment and replacement which need high-grade equipment, jigs and skill. For example, the drum assembling, replacement and adjustment service must be performed by the person who have finished the technical courses.

8-1. MECHANISM CONFIRMATION ADJUSTMENT JIG

So as to perform completely the mechanism adjustment prepare the following special jigs. So as to maintain the initial performance of the machine the maintenance and check are necessary. Utmost care must be taken so that the tape is not damaged. If adjustment needs any jig, be sure to use the required jig.

No.	Jig Item	Part No.	Code	Configuration	Remarks
1.	Torque Cassette Meter	JiGVHT-063	CZ		This cassette torque meter is used for checking and adjusting the torque of take-up for measuring tape back tension.
2.	Torque Gauge	JiGTG0090	CM		These Jigs are used for checking and adjusting the torque of take-up and supply reel disks.
		JiGTG1200	CN		
3.	Torque Gauge Head	JiGTH0006	AW		
4.	Torque Driver	JiGTD1200	CB		When fixing any part to the threaded hole using resin with screw, use the jig. (Specified torque 5 kg)
5.	Master Plane Jig and Reel Disk Height Adjusting Jig	JiGRH0002	BR		These Jigs are used for checking and adjusting the reel disk height.
		JiGMP0001	BY		
6.	Tension Gauge	JiGSG2000	BS		There are two gauges used for the tension measurements, 300 g and 2.0 kg.
		JiGSG0300	BF		
7.	Pinch pressing force measuring jig	JiGADP003	BK		This Jig is used with the tension gauge. Rotary transformer clearance adjusting jig.
8.	Alignment Tape	VROCPSV	CK		This tape is especially used for electrical fine adjustment.

Video	Audio	HiFi Audio	Track
625 Monoscope	6 kHz	—	35 µm
625 Monoscope and Colour bar	6 kHz and 1 kHz	—	49 µm

9.	Guide roller height adjustment driver	JiGDRiVERH-4	AP		This screwdriver is used for adjusting the guide roller height.
10.	X value adjustment gear driver	JiGDRiVER-6	BM		For X value adjustment
11.	Tension Pole Adjustment Driver	JiGHMEC-M005	CK		This Jig is used for adjustment of tension pole.

8-2. MAINTENANCE CHECK ITEMS AND EXECUTION TIME

Perform the maintenance with the regular intervals as follows so as to maintain the quality of machine.

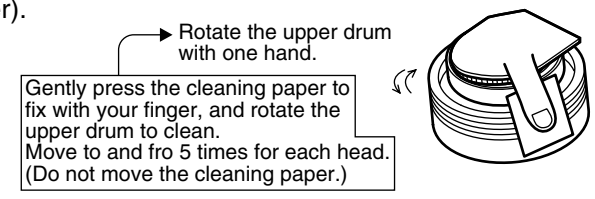
Parts \ Maintained	500 hrs.	1000 hrs.	1500 hrs.	2000 hrs.	Possible symptom encountered	Remarks
Guide roller ass'y	□	□	□	□	Lateral noises Head occasionally blocked	Abnormal rotation or significant vibration requires replacement.
Sup guide shaft	□	□	□	□		Clean tape contact part with the specified cleaning liquid.
Reverse guide	□	□	□	□		
Slant pole on pole base	□	□	□	□		
Full erase head	□	□	□	□	Colour and beating	Clean tape contact area with the specified cleaning liquid.
A/C head	□	□	□	□	Small sound or sound distortion	
Upper and lower drum ass'y	□	○□	○□	○□	Poor S/N ratio, no colour Poor flatness of the envelope with alignment tape	
Capstan D.D. motor	□	□	□	□	No tape running, uneven color	
Pinch roller	□	□	□	□	No tape running, tape slack	Clean rubber and rubber contact area with the specified cleaning liquid.
Reel belt		□		○	No tape running, tape slack, no fast forward/ rewind motion	
Tension band ass'y				○	Screen swaying	
Loading motor				○	Cassette not loaded or unloaded	
Idler ass'y				○	No tape running, tape slack	
Limiter pulley		□△		□○		
Supply/take-up main brake levers				○	Tape slack	
AHC (Automatic head cleaner)		○		○		Replace the roller of the cleaner when it wears down. Just change the AHC roller assembly for new one.

NOTE ○ : Part replacement. □ : Cleaning △ : Apply grease
<Specified> Cleaning liquid Industrial ethyl alcohol

* This mechanism does not need electric adjustment with variable resistor. Check parts. If any deviation is found, clean or replace parts.

Video head cleaning procedure

1. Apply one drop of cleaning liquid to the cleaning paper with the baby oiler.
2. Gently press the cleaning paper against the video head to fix your finger, and move the upper drum so that each head is passed to and fro 5 times (do not move the cleaning paper).
3. Wipe with the dry cleaning paper.

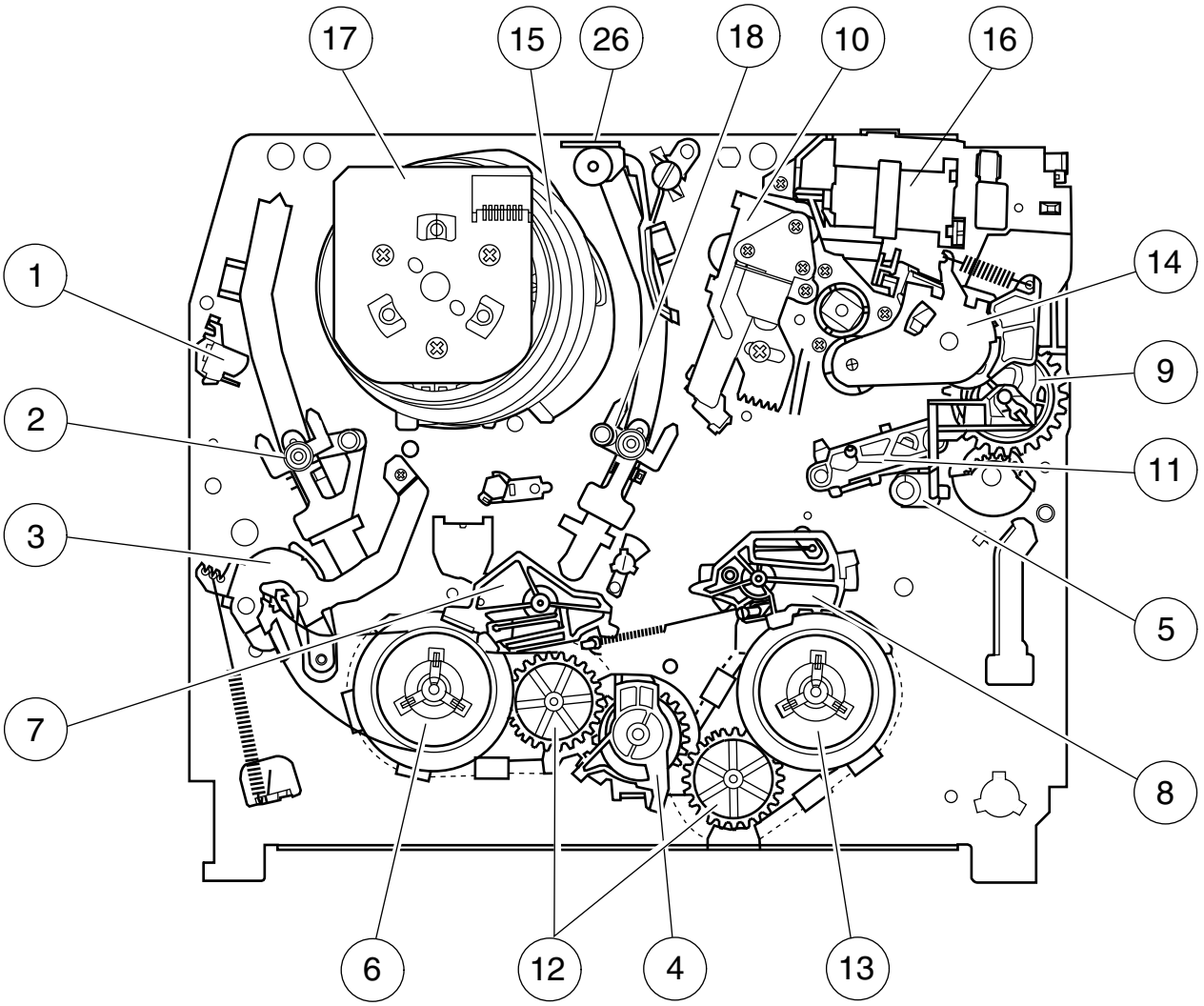


Notes :

- Use the commercially available ethanol of Class 1 as cleaning liquid.
- Since the video head may be damaged, do not move up and down the cleaning paper.
- Whenever the video head is cleaned, replace the cleaning paper.
- Do not apply this procedure for the parts other than the video head.

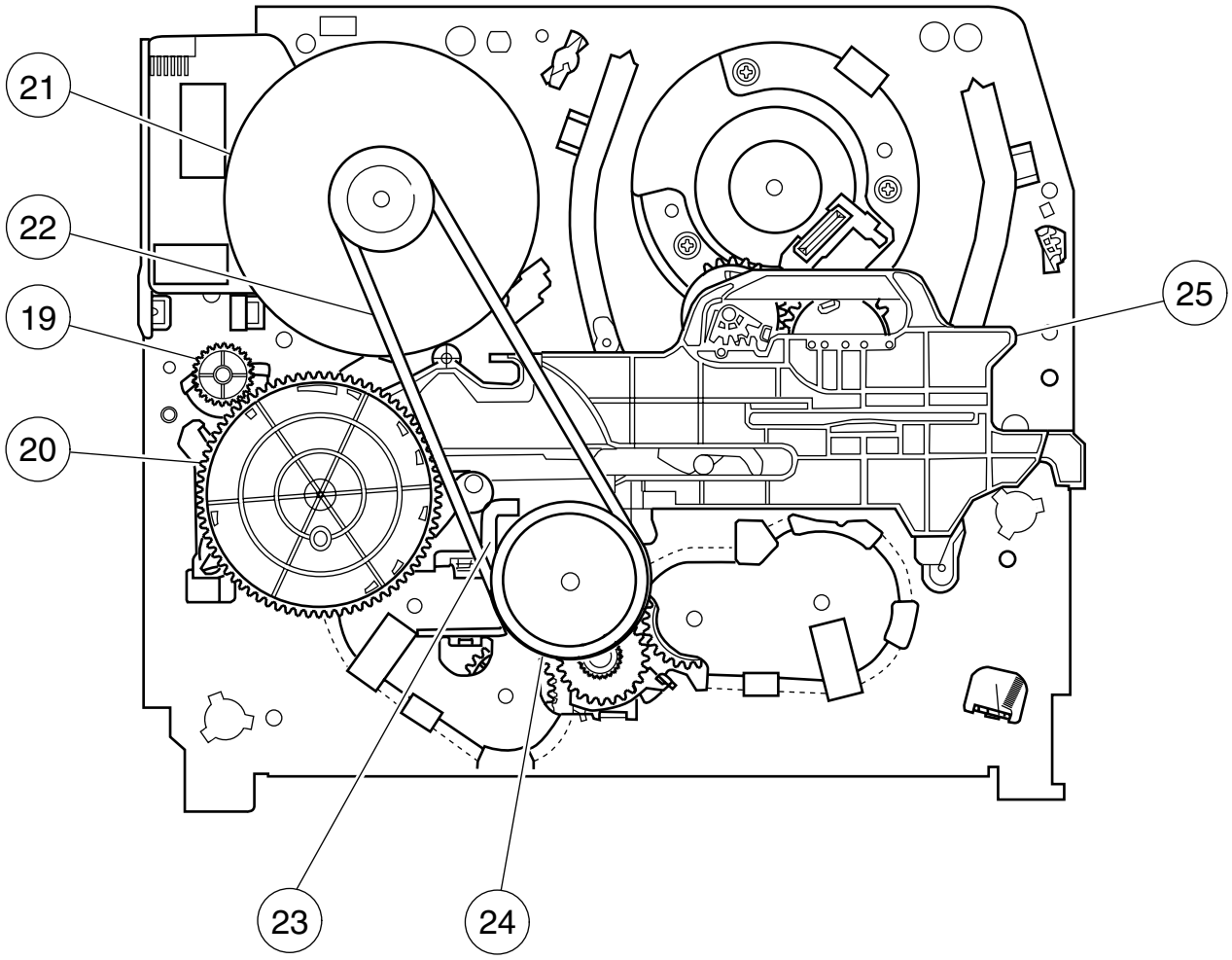
Parts Code	Description	Code
ZPAPRA56-001E	Cleaning Paper	AW
ZOiLR-02-24TE	Babe Oiler (Spoit)	AH

8-3. FUNCTION OF MAJOR MECHANICAL PARTS (TOP VIEW)



No.	Function	No.	Function
1	Full erase head	11	Reverse guide lever ass'y
2	Supply pole base ass'y	12	Reel relay gear
3	Tension arm ass'y	13	Take-up reel disk
4	Idler wheel ass'y	14	Pinch roller lever ass'y
5	Open guide	15	Drum ass'y
6	Supply reel disk	16	Loading motor
7	Supply main brake	17	Drum motor
8	Take-up main brake ass'y	18	Take-up pole base ass'y
9	Pinch drive cam	26	Auto head cleaner Ass'y
10	A/C head ass'y		

FUNCTION OF MAJOR MECHANICAL PARTS (BOTTOM VIEW)



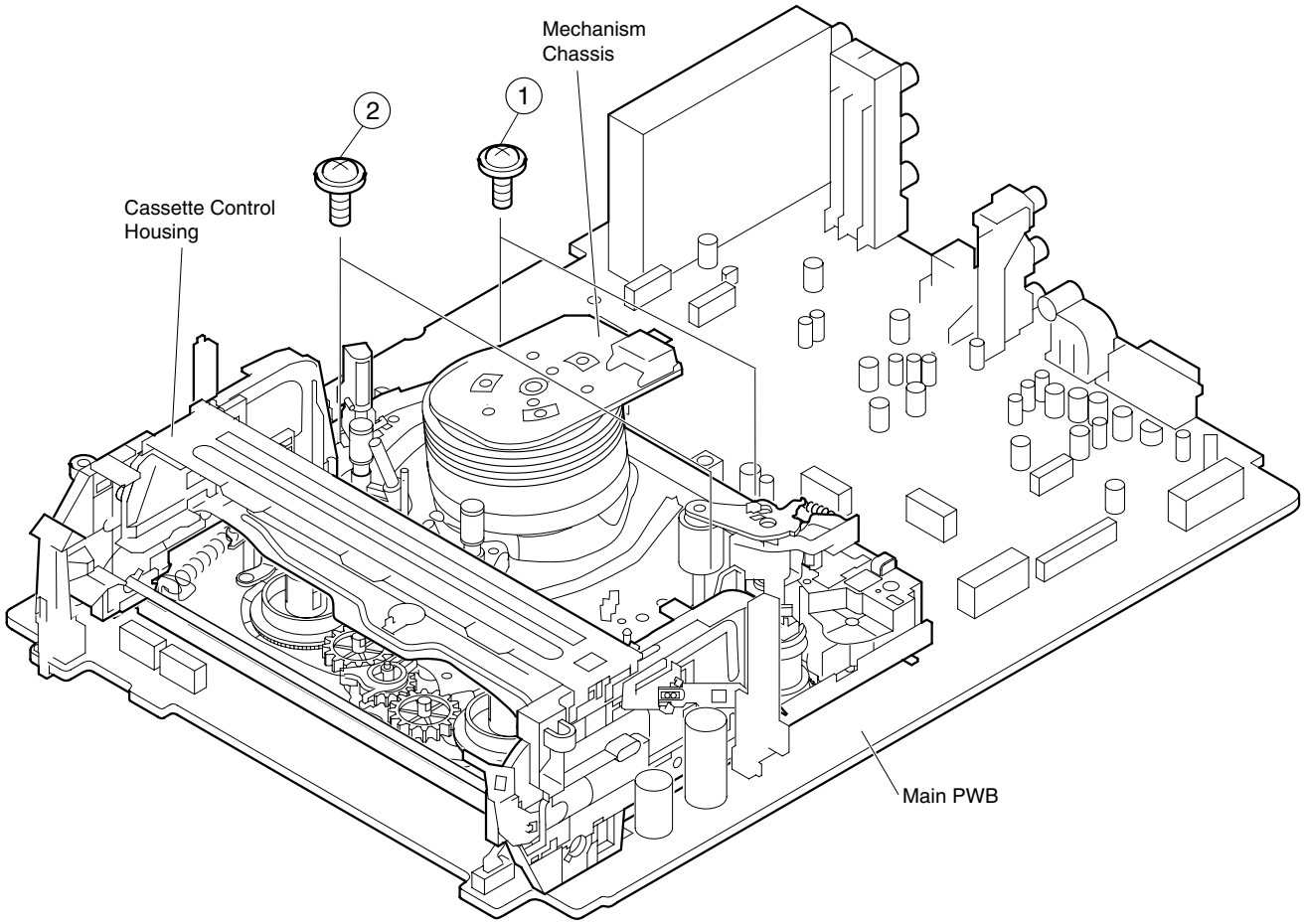
No.	Function	No.	Function
19	Syncro Gear	23	Clutch lever
20	Master cam	24	Limitter pulley ass'y
21	Capstan D.D. motor	25	Shifter
22	Reel belt		

8-4. DISASSEMBLY AND REASSEMBLY

8-4-1. DISASSEMBLING THE MECHANISM

1. When removing the mechanism from the set.
   Remove the two screws ① which connecting mechanism and main frame.
   Take out vertically the mechanism with attention to its edges, so that it does not damage the adjacent parts.

2. Removing the mechanism and cassette housing.
   Remove the two screws ② fixing the cassette housing to the mechanism, and remove the cassette housing.



8-4-2. CARES WHEN REASSEMBLING

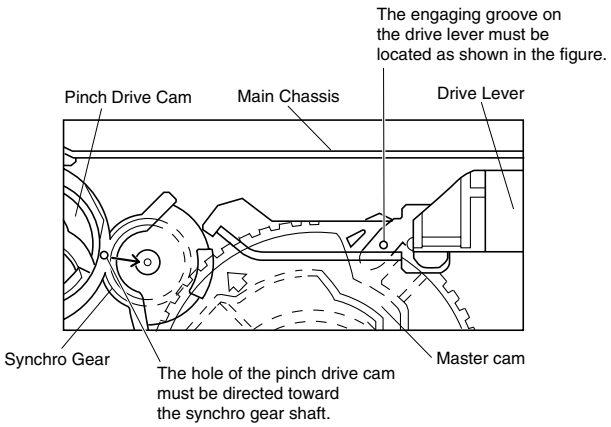
INSTALLING THE CASSETTE HOUSING

When the cassette housing is installed on the mechanism, the initial setting is essential condition.
There are two initial setting methods, namely electrical and mechanical.

1. Electrical initial setting

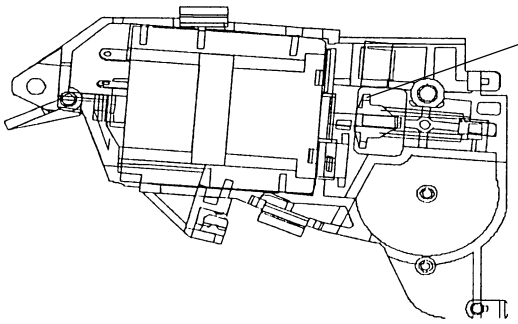
So as to perform initial setting of mechanism execute the Step 1 of Installation of cassette housing. After ascertaining the return to the initial setting position install the cassette housing. (Conditions: When mechanism and Main PWB have been installed)

STATE OF MECHANISM AT THE POSITION WHERE CASSETTE HOUSING WAS INSTALLED



2. Mechanical initial setting

- When performing the initial setting manually, press and turn the flange of the worm as shown in the figure below.
- When applying constant voltage to the loading motor
  - Unsolder at least one of the loading motor wires. If voltage is applied with the wires connected, the IC of the capstan motor may be damaged.
  - The voltage applied to the motor must be maximum of 9V. If the mechanism is activated by applying excessive voltage to the motor and is locked in the starting or end position, it may be damaged.
- After confirming that the mechanism is returned to the initial setting position, mount the cassette housing to the specified position. (This method is applied to the mechanism only.)
- After pushing the tip of the drive lever in the position shown in the figure, push the cassette housing backward to mount it to the specified position.



Rotate the flange of worm gear by using thin stick.
CW ---- Loading direction
CCW -- Ejection direction

Note
Be careful not to damage the gear of worm gear and worm wheel gear. It might cause a strange sound.

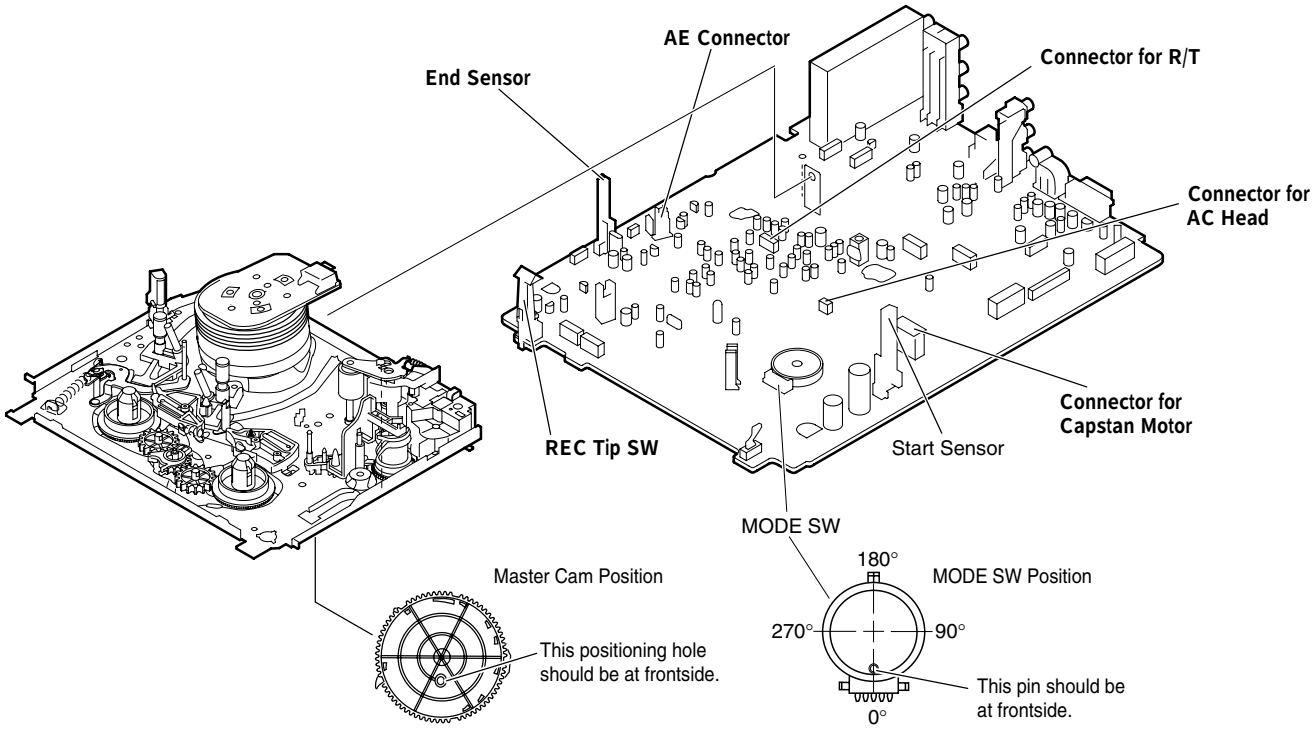
INSTALLING THE MECHANISM ON MAIN PWB

Lower the mechanism vertically with attention to its edges, and mount it without damaging the parts. Engage the pin of the mode SW and the long hole of the master cam.

* Please make sure to insert correctly.
  If not, strange moving will occur and will couse mechanism damage.

PARTS WHICH NEED PARTICULAR CARE

When installing the mechanism chassis on the Main PWB unit, take care so as to prevent deformation due to contact of mechanism chassis with REC Tip SW.



8-5. REMOVING AND INSTALLING THE CASSETTE HOUSING

- **Removal**

1. In the cassette removing mode, remove the cassette.
2. Unplug the power cord.
3. Remove in the following numerical order.
   a) Remove two screws ①.
   b) Slightly lift the rear of the cassette housing and slide it toward you. Slide the drive lever by pushing it toward you, and disengage the tip of the drive lever from the hole of the chassis. Then, pull up the cassette control housing .

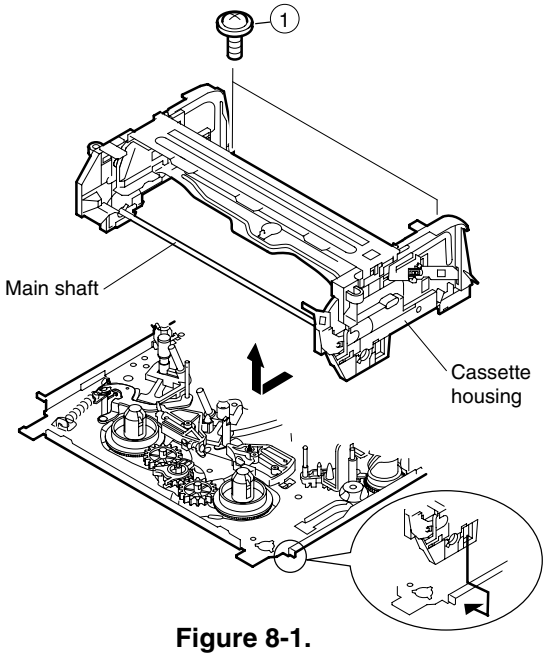


Figure 8-1.

- **Reassembly**

1. Before installing the cassette housing control, short-circuit between TP803 and TP802 on VCR Operaton PWB, press the eject button. The master cam turns and stop in eject position. Fit the drive lever to master cam through main chassis, push down and slide the drive lever towards to master cam.
   Push the cassette housing backward to mount it to the specified position.

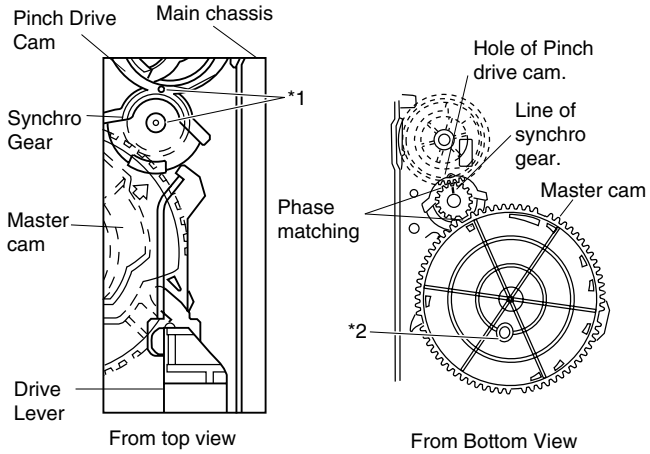


Figure 8-2.

*1: The hole of the pinch drive cam must be directed toward the synchro gear shaft.
*2: The long hole of the master cam must be located on the front side.

2. Install with the reverse order of removal. After installation is completed, disconnect and connect the AC plug.

Notes

1. In the case when you use the magnet screw driver, never approach the magnet driver to the A/C head, FE head, and drum.
2. When installing or removing, take care so that the cassette housing control and tool do not contact the guide pin or drum.
3. After installing the cassette housing control once perform cassette loading operation.

8-6. TO RUN A TAPE WITHOUT THE CASSETTE HOUSING CONTROL ASSEMBLY

1. Remove the full-surface panel.
2. Short-circuit between TP803 and TP802 on VCR Operation PWB.
3. Plug in the power cord.
4. Turn off the power switch.
5. Open the lid of a cassette tape by hand.
6. Hold the lid with two pieces of vinyl tape.
7. Set the cassette tape in the mechanism chassis.
8. Stabilize the cassette tape with a weight to prevent floating.
9. Turn on the power switch.
10. Perform running test.

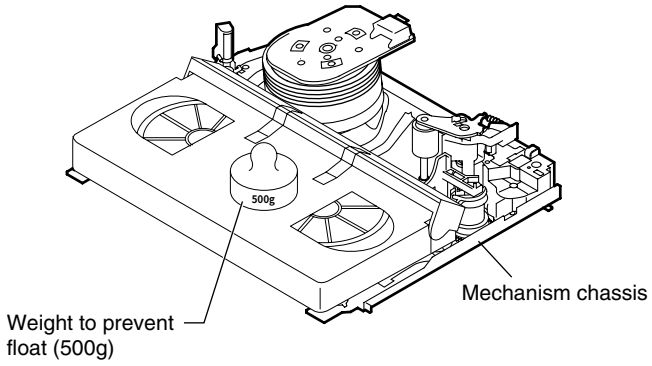


Figure 8-3.

Note:
The weight should not be more than 500g.

To take out the cassette tape.

1. Turn off the power switch.
2. Take out the cassette tape.

8-7. REEL DISK REPLACEMENT AND HEIGHT CHECK

- **Removal**

1. Remove the cassette control housing assembly.
2. Remove the Supply/Take-up main brake ass'y.
3. Lift the tension band on the reel disk side, remove tension band from the tension arm ass'y.
   (Do not deform it excessively.)
4. Remove the reel disk.

Note:
Take care so that the tension band ass'y and main brake ass'y are not deformed.

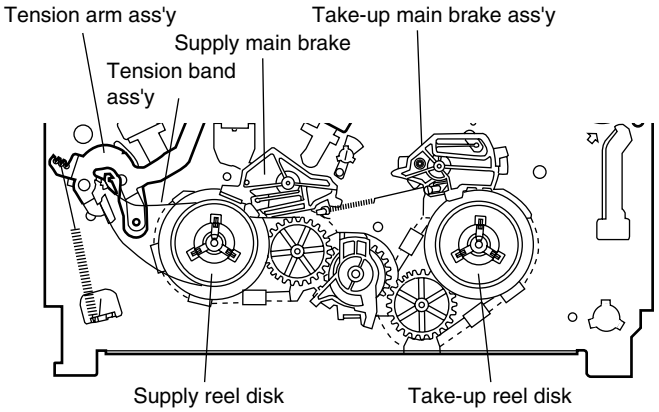


Figure 8-4.

- **Reassembly (Supply reel disk)**

1. Clean the reel disk shaft and apply grease (SC-141) to it.
2. Match the phases of reel disk and reel relay gear, and set the new reel disk.
3. After checking the reel disk height, wind the tension band ass'y around the reel disk.
4. Assemble the Supply main brake ass'y.

Notes:
1. When installing the reel disk, take due care so that the tension band ass'y is not deformed and grease does no adhere.
2. Do not damage the Supply main brake ass'y. Be careful so that grease does not adhere to the brake surface.

- **Reassembly (Take-up reel disk)**

1. Clean the reel disk shaft and apply grease (SC-141) to it.
2. Align the phase of the reel disk to that of the reel relay gear and to install a new take-up reel disk onto the shaft.
3. Check the reel disk height and reassemble the take-up main brake ass'y.

Notes:
1. Take care so that the Take-up main brake ass'y is not damaged. Take care so that grease does not adhere the brake surface.
2. After reassembly, check the video search rewind back tension (see **8-12**), and check the brake torque (see **8-16**).

- **Height checking and adjustment**

1. Set the master plane with due care so that it does not contact the drum.
2. When putting the master plane, shift the reverse guide a little in the loading direction. Care must be taken since excessive shift results in damage.

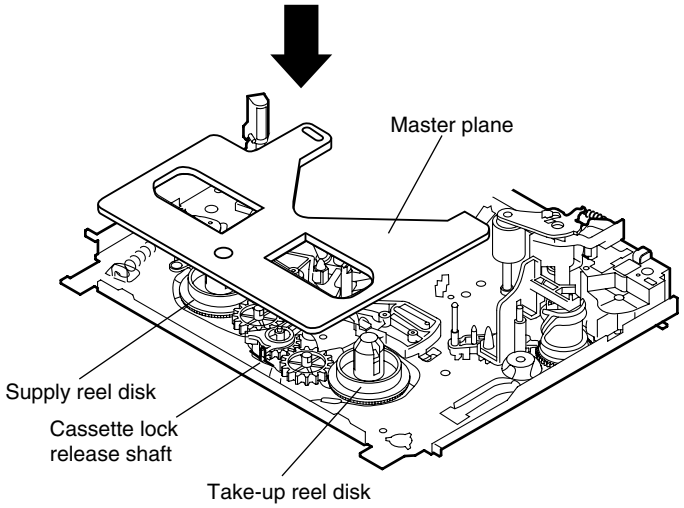


Figure 8-5.

Note:
1. Check that the reel disk is lower than part A but higher than part B. If the height is not correct, readjust the reel disk height by changing the poly-slider washer under the reel disk.
2. Whenever replacing the reel disk, perform the height checking and adjustment.

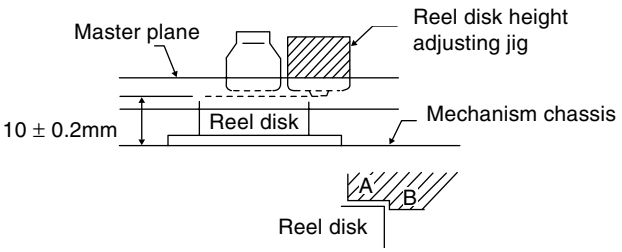


Figure 8-6.

8-8. CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN FAST FORWARD MODE

- **Remove the cassette housing control assembly.**
- **After short-circuiting between TP803 and TP802 provided at VCR Operation PWB, plug in the power cord.**

- **Setting**

1. Set a torque gauge to zero on the scale. Place it on the take-up reel disk.
2. Press the FF button.
3. To calculate the remaining capacity of the play back mode, slowly rotate the supply reel disk, and then shift it into the forward mode.

- **Checking**

1. Turn the torque gauge slowly (one rotation every 2 to 3 seconds) by hand in the CW direction.
2. Make sure that the indication of torque gauge is not less than 25mN·m (255gf·cm).

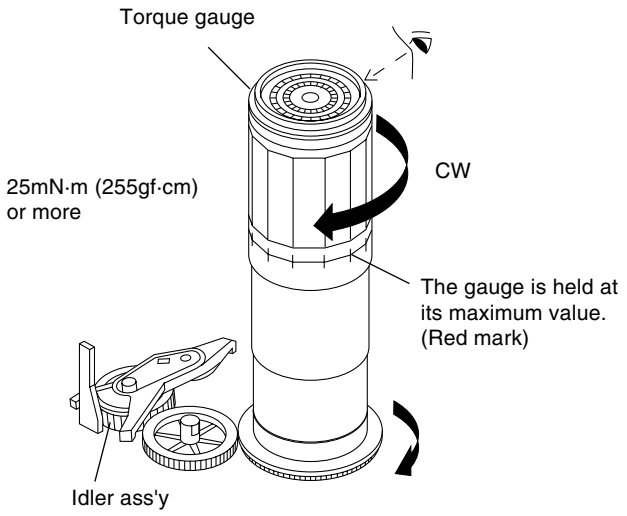


Figure 8-7.

- **Adjustment**

1. If the FF winding-up torque is less than the specified value, clean the capstan D.D. motor pulley, reel belt, and limiter pulley with cleaning liquid, and check again.
2. If the torque is less than the set value, replace the reel belt.

Notes:

1. Hold the torque gauge by hand so that it is not moved.
2. Do not keep the reel disk in lock state. Do not allow long-time measurement.

8-9. CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN REWIND MODE

- **Remove the cassette housing control assembly.**
- **After short-circuiting between TP803 and TP802 provided at VCR Operation PWB, plug in the power cord.**

- **Setting**

1. Set a torque gauge to zero on the scale. Place it on the supply reel disk.
2. Press the rewind button.
3. To calculate the remaining capacity, slowly rotate the take-up reel disk, and then shift it into the rewind mode.

- **Checking**

1. Turn the torque gauge slowly (one rotation every 2 to 3 seconds) by hand in the CCW direction.
2. Make sure that the indication of torque gauge is not less than 25mN·m (255gf·cm).

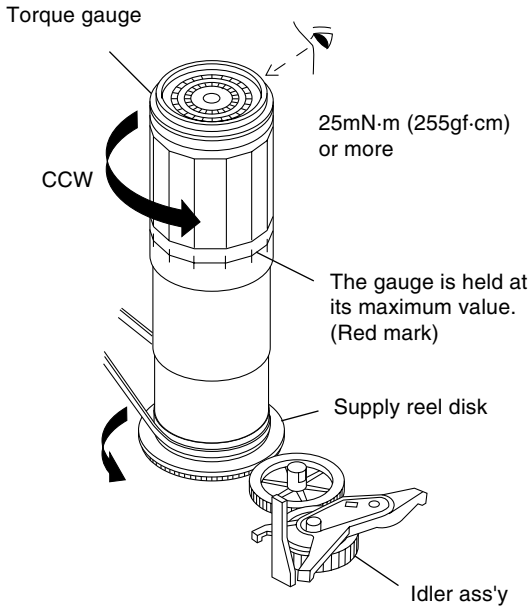


Figure 8-8

- **Adjustment**

1. If the rewind winding-up torque is less than the specified value, clean the capstan D.D. motor pulley, reel belt, and limiter pulley with cleaning liquid, rewind again, and check the winding-up torque.
2. If the winding-up torque is still out of range, replace the reel belt.

Notes:

1. Hold the torque gauge by hand so that it is not moved.
2. Do not keep the reel disk in lock state. Do not allow long-time measurement.

8-10. CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN RECORD/PLAYBACK MODE

- **Load the cassette torque meter into the unit.**
- **Press the picture record button, and set LP picture record mode.**

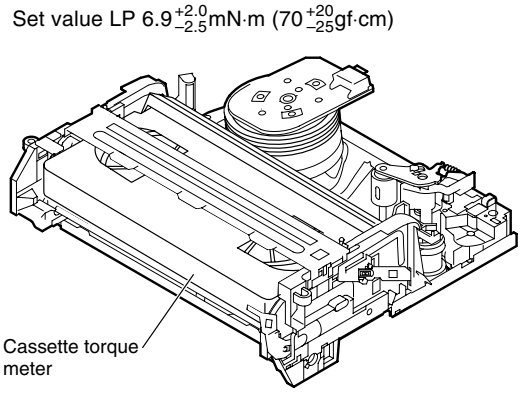


Figure 8-9.

- **Checking**

1. Make sure that value is within the setting 6.9 $^{+2.0}_{-2.5}$ mN·m (70 $^{+20}_{-25}$ gf·cm).
2. The winding-up torque fluctuates due to variation of rotation torque of limiter pulley ass'y. Read the center value of fluctuation as setting.
3. Set the LP record mode and make sure that the winding-up torque is within setting.

- **Adjustment**

If the playback winding-up torque is not within the setting, replace the limiter pulley assembly.

8-11. CHECKING AND ADJUSTMENT OF TAKE-UP TORQUE IN VIDEO SEARCH REWIND MODE

- **Remove the cassette housing control assembly.**
- **After short-circuiting between TP803 and TP802 provided at VCR Operation PWB, plug in the power cord.**

- **Setting**

Press the playback button and rewind button to set the video search rewinding mode.

- **Checking**

Place the torque gauge on the supply reel disk, and turn it counterclockwise very slowly (one rotation every 1 to 2 seconds) and check that the torque is within the set value 14.1 ± 3.5mN·m. (144 ± 35gf·cm)

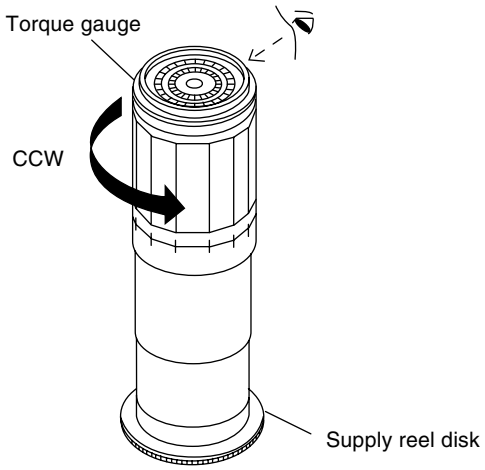


Figure 8-10.

Note:
Surely put the torque gauge on the reel disk to measure. If the torque gauge is raised, accurate measurement is impossible.

- **Adjustment**

If the rewinding playback winding-up torque is not within the setting, replace the limiter pulley assembly.

Note:
The winding-up torque fluctuates due to variation of rotation torque of supply reel disk. Read the center value of fluctuation as setting.

8-12. CHECKING THE VIDEO SEARCH REWIND BACK TENSION

- **Remove the cassette housing control assembly.**
- **After short-circuiting between TP803 and TP802 provided at VCR Operation PWB, plug in the power cord.**

- **Checking**

1. After pressing the play button, press the rewind button, and set the video search rewind mode.
2. Place the torque gauge on the take-up reel disk, and turn it counterclockwise very slowly (one rotation every 2 to 3 seconds) and check that the torque is within the set value 3.7 ± 1.5mN·m (38 ± 15gf·cm).

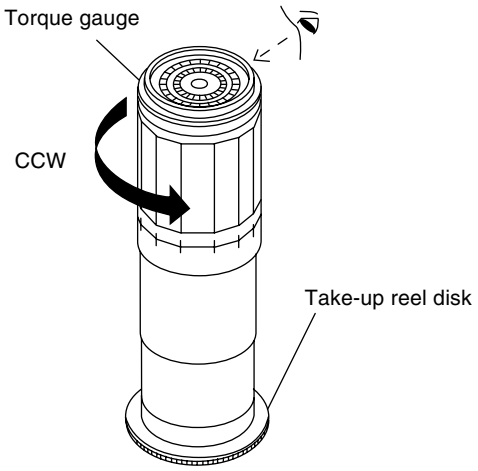


Figure 8-11.

Note:

Set the torque gauge securely on the take-up reel disk. If it is not secure, the measurement will be incorrect.

8-13. CHECKING THE PINCH ROLLER PRESSURE

*** Checking can be perform with or without cassette housing control.**

- **Remove the cassette housing control assembly.**
- **After short-circuiting between TP803 and TP802 provided at VCR Operation PWB, plug in the power cord.**

- **Checking**

Press the play button to set the playback mode.

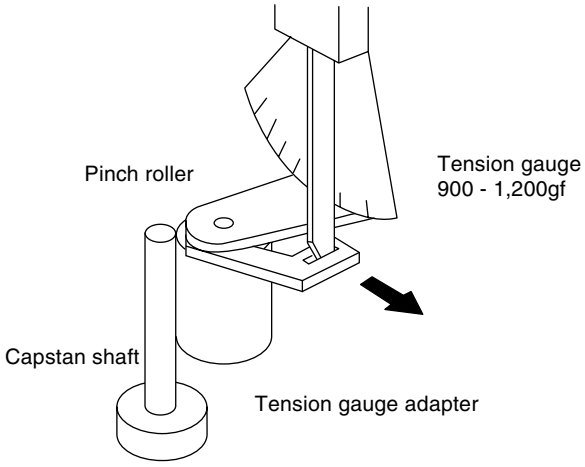


Figure 8-12.

1. Detach the pinch roller from the capstan shaft. Do not separate excessively. Or the pinch lever and pinch double action lever may disengage.
2. Engage the tension gauge adapter with the pinch roller shaft, and pull in the arrow direction.
3. Gradually return the pinch roller, and measure the pulling force when the pinch roller contacts the capstan shaft.
4. Make sure that the measured value is within setting change to 9.8 ± 2N (1.0 ± 0.2kgf).

8-14. CHECKING AND ADJUSTMENT OF TENSION POLE POSITION

- **Setting (with cassette control housing)**

1. Insert cassette tape (E-180)
2. Make the adjustment with the beginning of a E-180 tape.

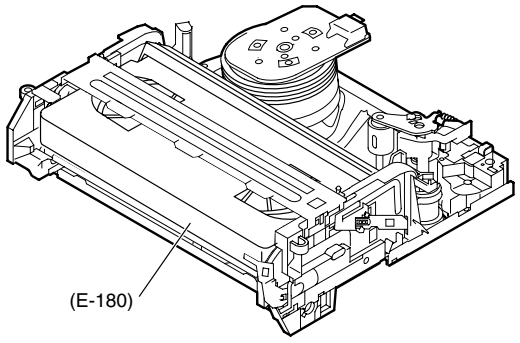
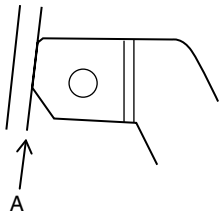


Figure 8-13.

- **Checking**

1. Set a cassette tape, push the REC button to place the unit in the SP record mode. Now check the tension pole position.
2. Visually check to see if the position of the tension pole is within the $0^{+0.5}_{-0.2}$ mm from the left end and the line of Standard-A of the right side of the tension pole.

Standard-A = $0^{+\ 0.5}_{-\ 0.2}$ mm ($^{+0.5\ \text{inside}}_{-0.2\ \text{outside}}$)



Make the adjustment with the beginning of a E-180 tape.

Figure 8-14.

At left side from the line of Standard-A.

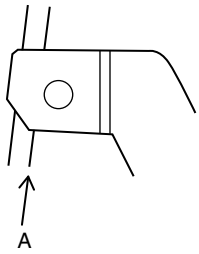


Figure 8-15.

Insert the tension pole adjustment driver to main chassis hole, and rotate clockwise.

At right side from the line of Standard-A.

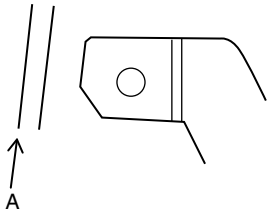


Figure 8-16.

Insert the tension pole adjustment driver to main chassis hole, and rotate counterclockwise.

Tension pole adjustment driver adjusting direction

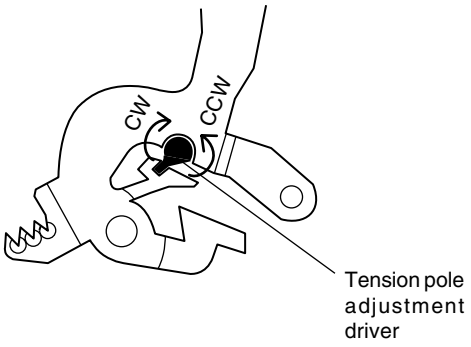


Figure 8-17.

8-15. CHECKING AND ADJUSTMENT OF RECORD/PLAYBACK BACK TENSION

- **Setting (with cassette control housing)**

1. Insert cassette torque meter.

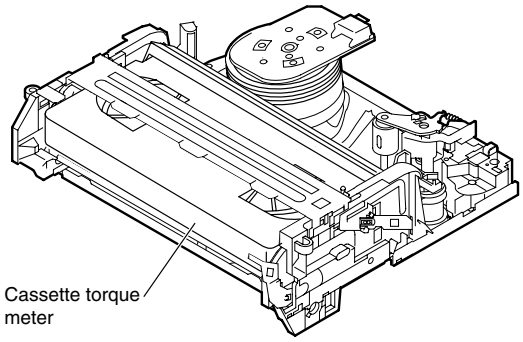


Figure 8-18.

- **Checking**

1. Push the REC button to place the unit in the record mode.
2. At this time ascertain that the back tension is within the setting 3.9 ~ 5.5mN·m (40 ~ 56gf·cm) by seeing the indication of torque cassette meter.

- **Adjustment**

1. If the indication of torque cassette meter is lower than the setting, shift the tension spring engagement to the part A.
2. If the indication of torque cassette meter is higher than the setting, shift the tension spring engagement to the part B.

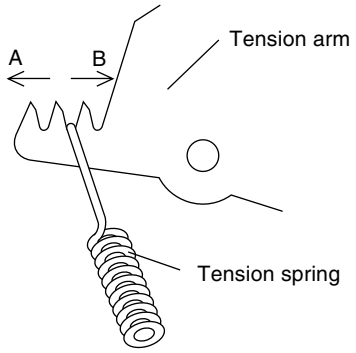
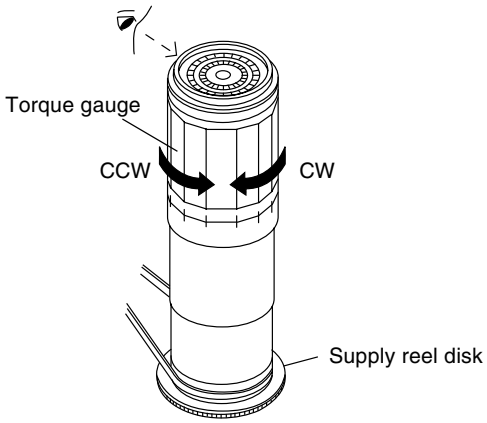


Figure 8-19.

8-16. CHECKING THE BRAKE TORQUE

- **Checking the brake torque at the supply side**



CCW:	$4.41 \pm^{+2.0}_{-1.5}$ mN·m ($45 \pm^{+20}_{-15}$ gf·cm)
CW:	$4.12 \pm^{+1.5}_{-1.2}$ mN·m ($42 \pm^{+15}_{-12}$ gf·cm)

Figure 8-20.

- **Remove the cassette housing control assembly.**
- **After short-circuiting between TP803 and TP802 provided at VCR Operation PWB, plug in the power cord.**

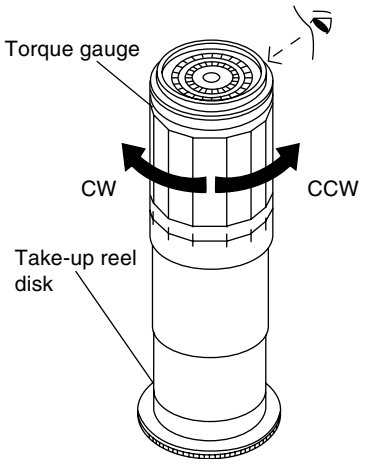
- **Setting**

1. Switch from the FF mode to the STOP mode.
2. Disconnect the power cord.
3. Set a torque gauge to zero on the scale. Place it on the supply reel disk.
4. Please check Idler gear not contact with reel relay gear (SU side)

- **Checking**

Turn the torque gauge at a rate of about one turn/2 sec in the CW direction/CCW direction with respect to the supply reel disk so that the reel disk and torque gauge pointer rotate at equal speed, and make sure that the value is within the setting (CW direction: $4.12 \pm^{+1.5}_{-1.2}$ mN·m (42^{+15}_{-12}gf·cm); CCW direction: $4.41^{+2.0}_{-1.5}$ mN·m ($45 \pm^{+20}_{-15}$ gf·cm).

- **Checking the brake torque at the take-up side**



CCW:	$4.41 \pm^{+2.0}_{-1.5}$ mN·m ($45 \pm^{+20}_{-15}$ gf·cm)
CW:	$4.12 \pm^{+1.5}_{-1.2}$ mN·m ($42 \pm^{+15}_{-12}$ gf·cm)

Figure 8-21.

- **Remove the cassette housing control assembly.**
- **After short-circuiting between TP803 and TP802 provided at VCR Operation PWB, plug in the power cord.**

- **Setting**

1. Switch from the FF mode to the STOP mode.
2. Disconnect the power cord.
3. Set a torque gauge to zero on the scale. Place it on the take-up reel disk.
4. Please check Idler gear not contact with reel relay gear (TU side)

- **Checking**

1. Turn the torque gauge at a rate of about one turn/2 sec in the CCW direction/CW direction so that the reel disk and torque gauge pointer rotates at equal speed and make sure that the value is within the setting (CCW direction: $4.41^{+2.0}_{-1.5}$ mN·m (45^{+20}_{-15} gf·cm), CW direction: $4.12^{+1.5}_{-1.2}$ mN·m (42^{+15}_{-12}gf·cm).
2. Adjustment of the brake torque at the supply side and the take-up side

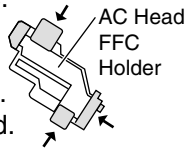
- Unless the supply side brake torque or take-up side brake torque is within the setting, clean the felt surface of reel disk (supply, take-up) brake lever, check again the brake torque.
- If value cannot be set within the setting yet, replace the main brake ass'y or main brake spring.

8-17. REPLACEMENT OF A/C HEAD

1. In eject position unplug the power cord.

- **Removal**

1. Take out FFC holder from main chassis. (Push 3 hooking point and pull-up the holder).
2. Remove the screws ①②③, Tilt screw.
3. Unsolder the PWB fitted to the A/C head.



Notes:

1. When replacing, never touch the head. If you touched, clean with the cleaning liquid.
2. When removing the screw ③, take care so that the spring may out.

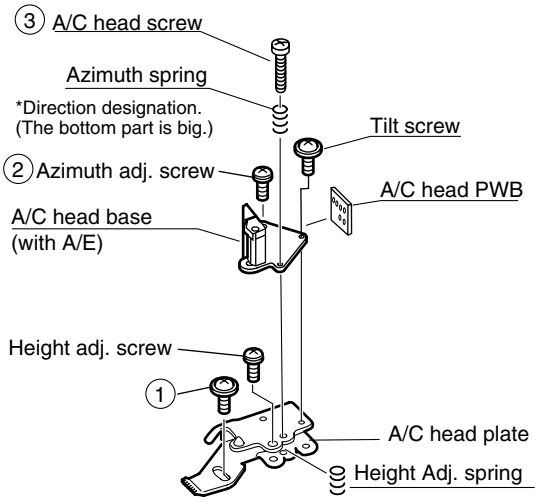


Figure 8-22.

- **Replacement**

1. Solder the removed PWB to the new head assembly.
2. Adjust the height from the A/C head plate (lower surface) to the A/C head base to 10.8mm with slide calipers. (3 places of azimuth screw section, tilt screw section and A/C head front section) (See the figure below.)

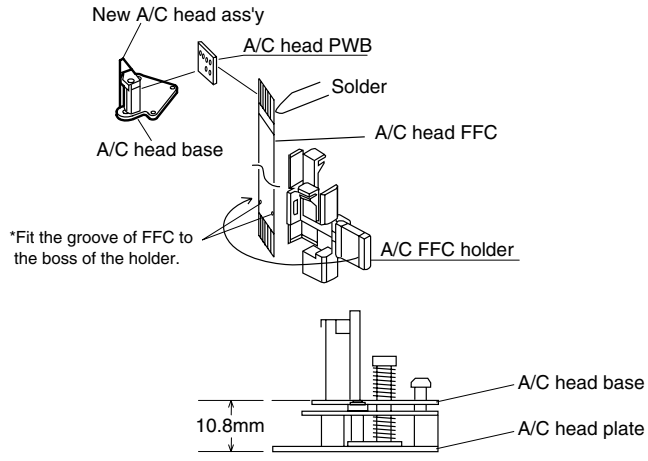


Figure 8-23.

3. Align the left end of gear of A/C head plate with the punched mark of chassis, tentatively tighten the screws ① so as to ensure smooth motion of A/C head plate. Tentative tightening torque must be 0.45 ± 0.05N·m (4.5 ± 0.5kgf·cm) and final tightening torque must be 0.6N·m (6kgf·cm).

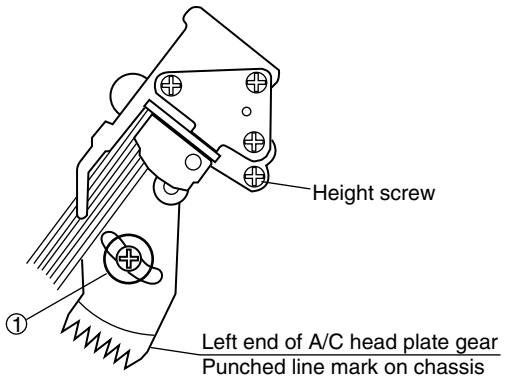


Figure 8-24.

Notes:

1. If the screw ① is tighten tentatively too loose, the azimuth and height of A/C head may change when they are finally tightened. Therefore care must be taken.
2. After completion of A/C head be sure to adjust tape running. (Execute the running adjustment by the method described in **8-19**.)

8-18. A/C HEAD HEIGHT ROUGH ADJUSTMENT

- **Setting**

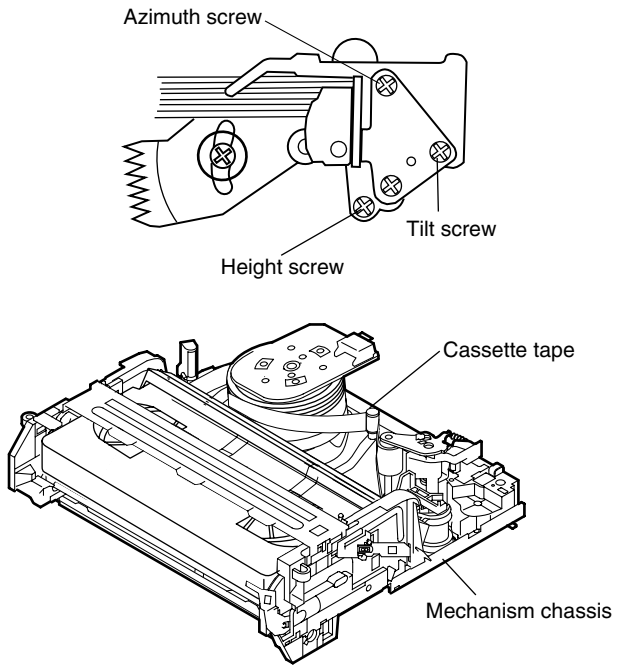


Figure 8-25.

1. Set the cassette tape in the unit.
2. Press the PLAY button to put the unit in the playback mode.
3. Roughly adjust the height of the A/C head by turning the height screw until the tape is in the position shown below.

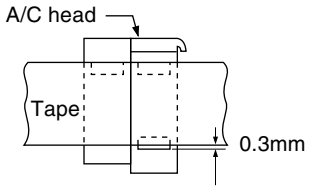


Figure 8-26.

- **Adjustment**

Adjust the height screw visually so that the control head is visible 0.3 mm below the bottom of the tape.

8-19. ADJUSTMENT OF TAPE DRIVE TRAIN

1. Tape run rough adjustment
   ① Check and adjust the position of the tension pole. (See **8-14**.)
   ② Check and adjust the video search rewind back tension. (See **8-12**.)
   ③ Connect the oscilloscope to the test point for ATR signal output (TP201). Set the synchronism of the oscilloscope to EXT. The PB CHROMA ATR signal is to be triggered by the head switching pulse (TP202).
   ④ Set the alignment tape (VROCPSV) to play.

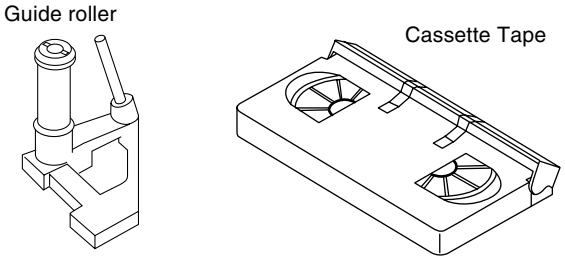


Figure 8-27.

   ⑤ Press the tracking button (+), (–) and change the ATR signal waveform from max to min and from min to max. At this time make sure that the ATR signal waveform changes nearly parallel.
   ⑥ Unless the ATR signal waveform changes nearly parallel, adjust the height of supply side and take-up side guide roller so that the envelope waveform changes nearly parallel. (For ATR signal adjustment procedure refer to **Figure 8-31**.)
   ⑦ Turn the tilt screw to remove the tape crease at the fixing guide flange.
   Playback the tape and check for tape crease at the fixing guide flange.
   (1) If there is no tape crease
   Turn the tilt screw clockwise so that tape crease appears once at the flange, and then return the tilt screw so that the crease disappears.
   (2) If there is tape crease
   Turn counterclockwise the tilt screw so that the tape crease disappears.
   (Reference) If the tilt screw is turned clockwise crease appears at the lower flange.

Notes:

1. Previously set the tracking control in the center position, and adjust the ATR signal waveform to maximum with X value adjustment nut. Thereby the tape run rough adjustment is facilitated.
2. Especially the outlet side ATR signal waveform must have higher flatness.

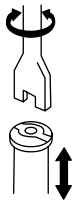


Figure 8-28.

2. Adjustment of A/C head height and azimuth
   ① Perform the initial setting of A/C head position by the method stated in "**8-17** Replacement 3".
   ② Connect the oscilloscope to the audio output terminal.
   ③ Using the alignment tape in which 1 kHz linear audio signal has been recorded, adjust the height screw so as to get max audio output.
   ④ Using the alignment tape in which 7 kHz linear audio signal has been recorded, adjust the azimuth screw so as to get max audio output.
   ⑤ The adjustment of ③ and ④ twice or three times repeat, and finally adjust ④.

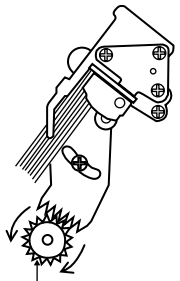
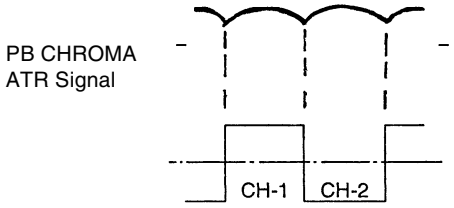


Figure 8-29.

3. Tape run adjustment
   ① Connect the oscilloscope to PB CHROMA ATR signal output test point, set oscilloscope sync to EXT, trigger-input the PB CHROMA signal (head switching pulse).
   ② Rough adjustment of X value
   Tentatively fix A/C head arm screws ① by the method described in "**8-17** Replacement 3".
   Playback the alignment tape (VROCPSV) and shortcircuit between TP803 and TP802 on VCR Operation PWB. As a result the auto-tracking is automatically cancelled, so that the X value adjustment mode is set.
   Move the A/C head with the X value adjustment gear driver (JiGDRiVER-6) by the method shown in **Figure 8-34**, and adjust the A/C head so as to get the maximum ATR signal waveform. (Note: When the A/C head is adjusted, adjust so that the maximum ATR signal waveform is obtained nearest the position of initial setting made in **8-17**.)
   ③ Next, press the tracking button (+), (–) and change the ATR signal waveform from max to min and from min to max. At this time adjust the height of supply and take-up side guide roller with the adjustment driver (JiGDRiVERH-4) so that the ATR signal waveform changes nearly parallel.
   ④ If the tape is lifted or sunk from the helical lead surface, the PB CHROMA ATR signal waveform appears as shown in **Figure 8-31**.
   ⑤ Press the tracking button (+), (–) and make sure that the ATR signal waveform changes nearly parallel.
   ⑥ Finally, check tape crease near the reverse guide. If tape crease is found, adjust tilt screw 45˚ counter clockwise. Small tape crcase will appear at retain guide after this adjustment finished.



Head switching pulse

Figure 8-30.

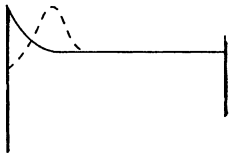
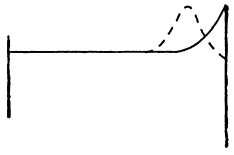
	When the tape is above the helical lead.		When the tape is below the helical lead.	
	Supply side	Take-up side	Supply side	Take-up side
				
				
Adjustment	Supply side guide roller rotated in clockwise direction (lowers guide roller) to flatten ATR signal.	Take-up side guide roller rotated in clockwise direction (lowers guide roller) to flatten ATR signal.	Supply side guide roller rotated in counterclock-wise direction (raises guide roller) to make the tape float above the helical lead. The supply side guide roller is then rotated in the clockwise direction to flatten the ATR signal.	Take-up side guide roller rotated in counterclock-wise direction (raises guide roller) to make the tape float above the helical lead. The take-up side guide roller is then rotated in the clockwise direction to flatten the ATR signal.

Figure 8-31.

4. A/C head X value adjustment
   ① Fix A/C head arm screws ① and ② tentatively by the method described in "**8-17** Replacement 3".
   ② Playback the alignment tape (VROCPSV), and shortcircuit between TP803 and TP802 on VCR Operatin PWB. As a result the auto-tracking is automatically cancelled, so that the X value adjustment mode is set.
   ③ Move the A/C head with the X value adjustment gear driver by the method shown in **Figure 8-34**, and adjust the A/C head so as to get the maximum ATR signal waveform. (Note: At this time adjust so as to get the maximum ATR signal waveform nearest the A/C head position which has been set in case of X value rough adjustment as stated in **8-19**, 3-②.)
   ④ Adjust the playback switching point (Refer to the electric adjustment method.)
   ⑤ Playback the self-picture-recorded tape, and check the flatness of ATR signal waveform and sound.

Notes:
When the A/C head X value adjustment is performed, be sure to perform at first X value rough adjustment (refer to **8-19**, 3-②).

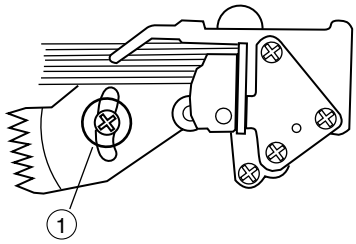


Figure 8-32.

8-20. REPLACEMENT OF THE CAPSTAN D.D. (DIRECT DRIVE) MOTOR

- Remove the mechanism from the set.

- **Removal (Follow the order of indicated numbers.)**

1. Unsolder loading motor wire and drum FFC to remove them from Capstan D.D. motor control PWB.
2. Remove the reel belt ①.
3. Remove the three screws ②.

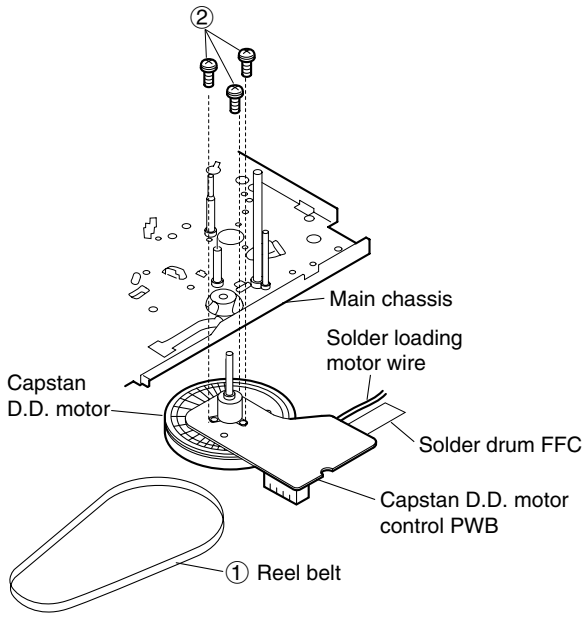


Figure 8-33.

- **Reassembly**

1. Taking care so that the capstan shaft does not contact the mechanism chassis, set its position on the mechanism chassis, and then install with the three screws ②.
2. Install the reel belt ①.
3. Solder loading motor wire and drum FFC to the capstan D.D. motor control PWB.

Notes:

1. After installing the capstan D.D. motor, be sure to rotate the capstan D.D. motor and check the movement.
2. Load a tape, and check for wrinkles on the tape near the reverse guide in the playback mode. Make adjustments according to "2. Adjustment of A/C head height and azimuth" in "**8-19.** ADJUSTMENT OF TAPE DRIVE TRAIN". If wrinkles are found, make adjustments according to "3. Tape run adjustment" in the same section.
3. When soldering the FFC and the loading motor wires, do not scatter solder over the magnet of the capstan rotor.

8-21. REPLACEMENT OF DRUM D.D. MOTOR

1. Set the ejection mode.
2. Withdraw the main power plug from the socket.

- **Removal (Perform in numerical order.)**

1. Disconnect the FFC cable ①.
2. Unscrew the D.D. stator assembly fixing screws ②.
3. Take out the D.D. stator assembly ③.
4. Unscrew the D.D. rotor assembly fixing screws ④.
5. Take out the D.D. rotor assembly ⑤.

Notes:

1. In removing the D.D. stator assembly, part of the drum earth spring pops out of the pre-load collar. Be careful not to lose it.
2. Install, so that the D.D. rotor ass'y and upper drum ass'y mounting direction check holes align. (Align the upper drum dent with the rotor hole.)
3. Be careful not to damage the upper drum or the video head.
4. Protect the hole elements from shock due to contact with D.D. stator or D.D. rotor ass'y.
5. After installation adjust the playback switching point for adjustment of servo circuit.

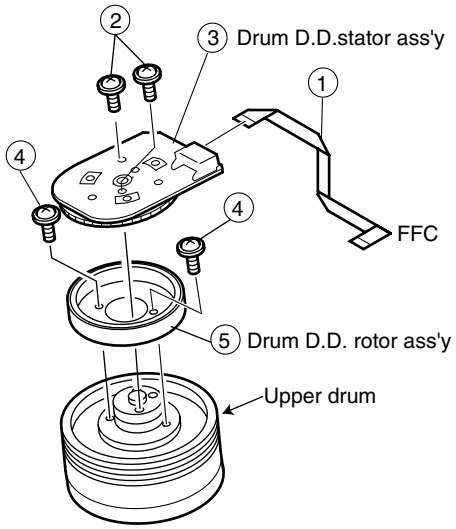


Figure 8-34.

8-22. REPLACING THE UPPER AND LOWER DRUM ASSEMBLY

- **Replacement (Perform in the numerical order)**

① Remove the motor as stated in **8-21** Replacement of Drum D.D. motor.
② Remove the drum earth brush ass'y ②.
③ Remove the upper and lower drum assembly from main chassis ①.
④ Remove the drum FFC holder ③.

[Cares when replacing the drum]

1. Be careful so that the drum earth brush is not lost.
2. Do not touch directly the drum surface.
3. Fit gently the screwdriver to the screws.
4. Since the drum assembly is an extremely precise assembly, it must be handled with utmost care.
5. Make sure that the drum surface is free from dust, dirt and foreign substances.
6. After replacing the drum be sure to perform the tape running adjustment.
   After that, perform also the electrical adjustment.
   • Playback switching point adjustment
   • X-position adjustment and check
   • Standard and x-3 slow tracking adjustment
7. After replacing the drum clean the drum.

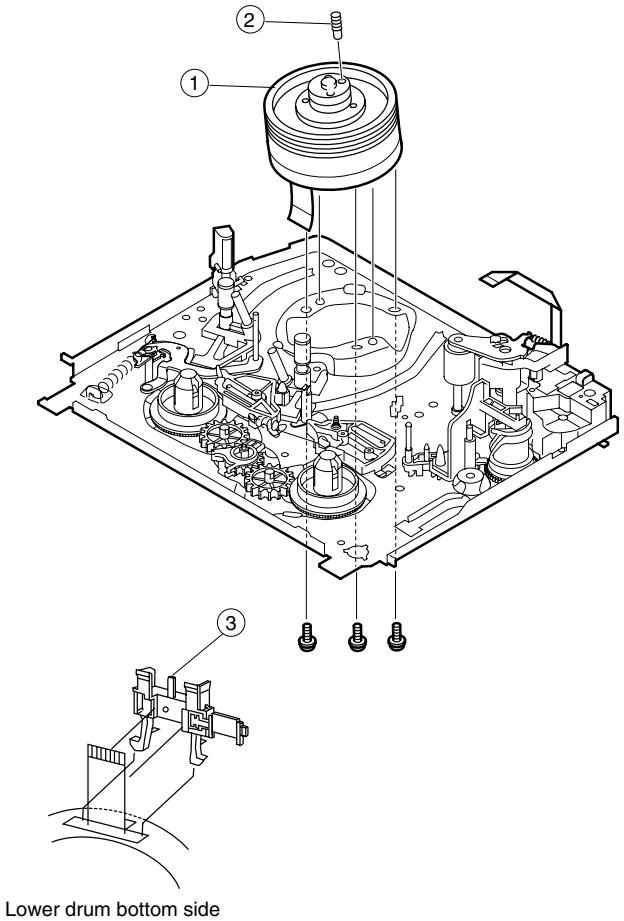


Figure 8-35.

8-23. ASSEMBLING OF PHASE MATCHING MECHANISM COMPONENTS

- **Assemble the phase matching mechanism components in the following order.**

1. Assemble the reverse guide lever and pinch drive cam.
2. Mounting the sifter (on the back of the mechanism chassis).
3. Mounting the master cam (on the back of the mechanism chassis).
4. Assemble synchro gear (on the back of the mechanism chassis).
5. Assemble the loading motor parts.

- **Pinch drive cam and REVERSE GUIDE LEVER assembling method.**

(Assemble the following parts in numerical order.)
(1) Pinch drive cam ①
(2) Reverse guide spring ②
(3) Reverse guide lever ass'y ③
(4) Open guide ④

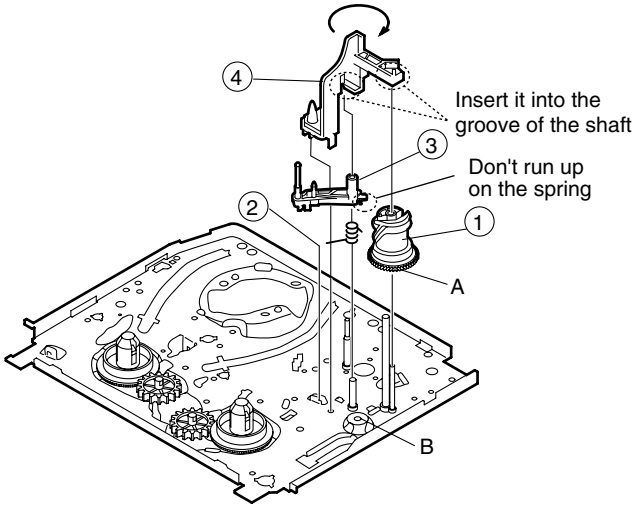
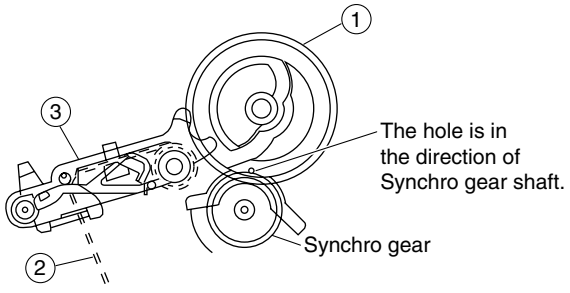
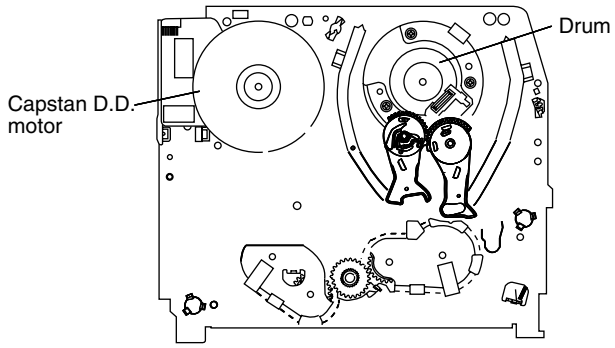


Figure 8-36.



From Top View

8-24. INSTALLING THE SIFTER



(Bottom side of mechanism chassis)

Figure 8-37.

* Remove the SUP/TU main brake before installation.

1. Make sure that the loading arm T and S are at the Phase-Matching point as shown below ⓐ.
2. Fix the sifter position setting part to the roading arm T position setting part as shown in figure ⓑ.
3. Make sure tension arm not run on the sifter as shown in figure ⓒ.

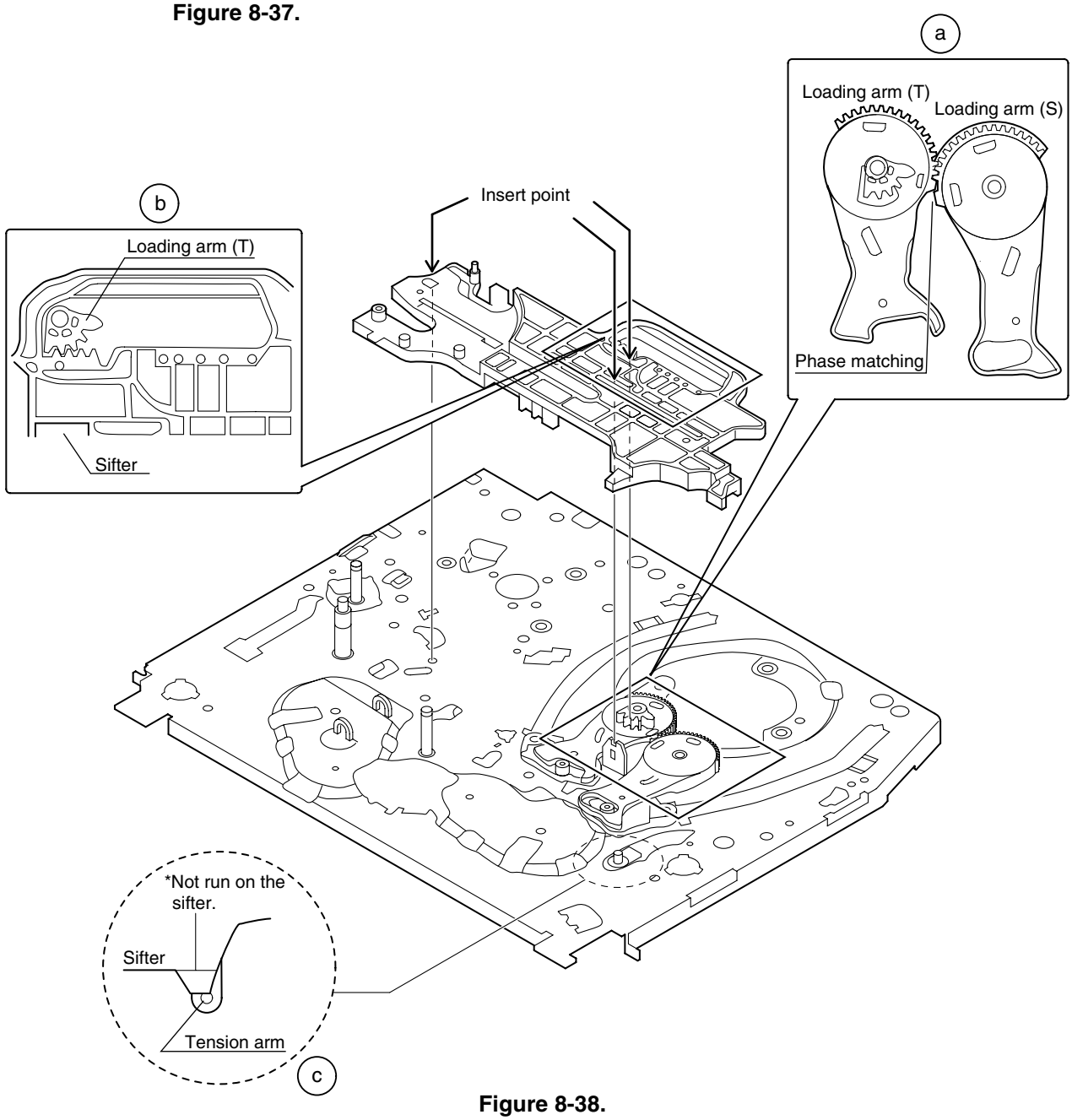


Figure 8-38.

8-25. INSTALLING THE MASTER CAM (AT REAR SIDE OF MECHANISM CHASSIS)

1. Before installing the master cam, make sure that the sifter is at initial position. (Right side from bottom view)
2. Place the master cam by pushing in so that the long hole of the master cam comes to the front side as shown below.
3. Fix the E-ring.
4. Adjust the master cam and pinch drive cam, fix the synchro gear in correct position.

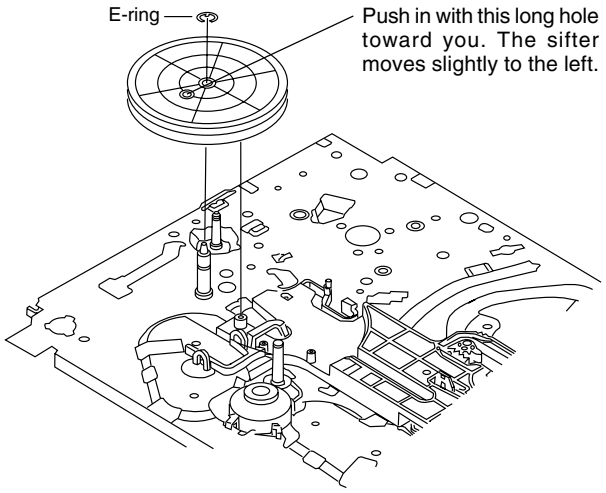


Figure 8-39-1.

Note:
See the figure below for the phase matching between the master cam synchro gear and pinch drive cam.

- Phase alignment of the master cam and the synchro gear;
  Align the wide tooth space and the composite tooth.
- Phase alignment of the synchro gear and the pinch drive cam;
  Adjust the teeth so as to orient the rib of the synchro gear and the hole of the pinch drive cam.

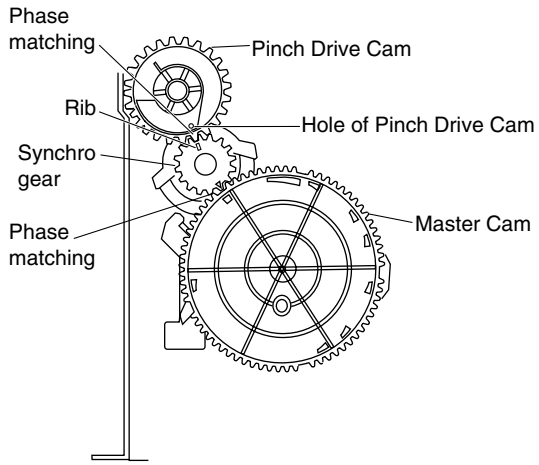


Figure 8-39-2.

8-26. REPLACEMENT OF LOADING MOTOR

- **Removal**

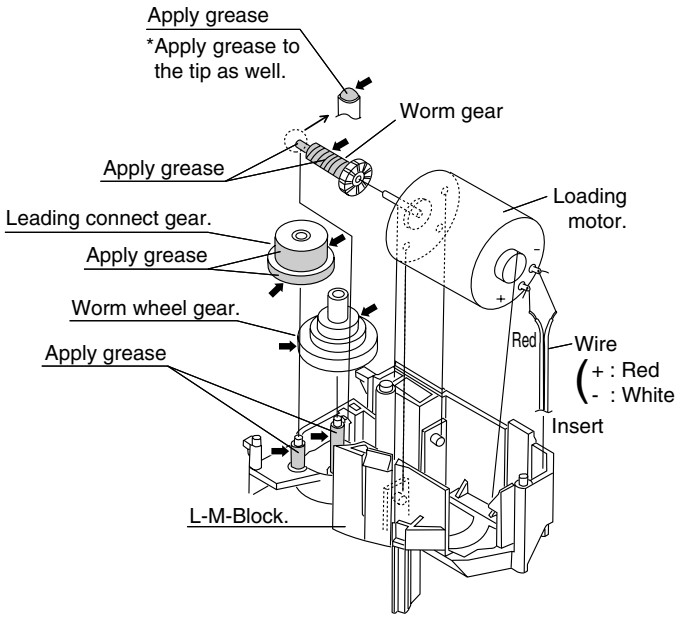


Figure 8-40.

- **Replacement**

Remove the loading motor, and install the replacement loading motor as shown below.

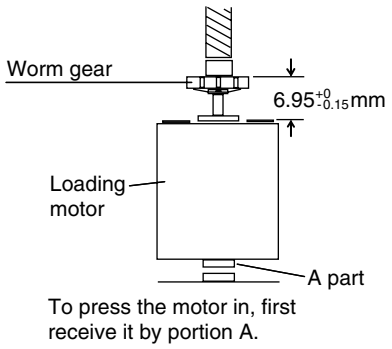
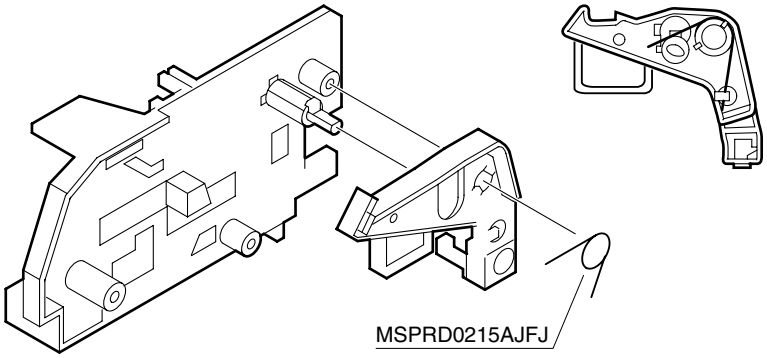


Figure 8-41.

The loading motor pressing-in must be less than 196N (20 kgf).
Adjust the distance between motor and pulley to 6.95 $^{+0}_{-0.15}$ mm.

8-27. ASSEMBLY OF CASSETTE HOUSING

1. Proof lever, Proof lever spring and Holder R



*Proof lever spring fixing direction designated.

Figure 8-42.

2. Open lever, Sensor Plate and Drive Lever to Frame R

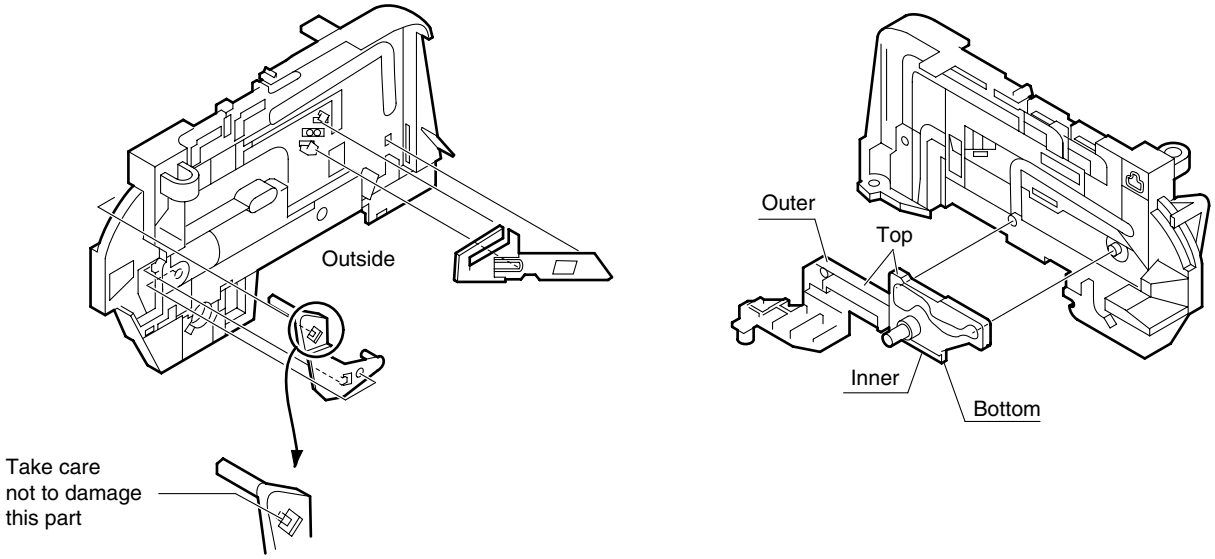


Figure 8-43.

3. Spring to Drive Arm R

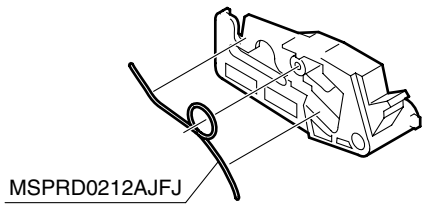


Figure 8-44.

4. Frame R, Frame L, Drive Arm R, Drive Arm L, Upper Plate.

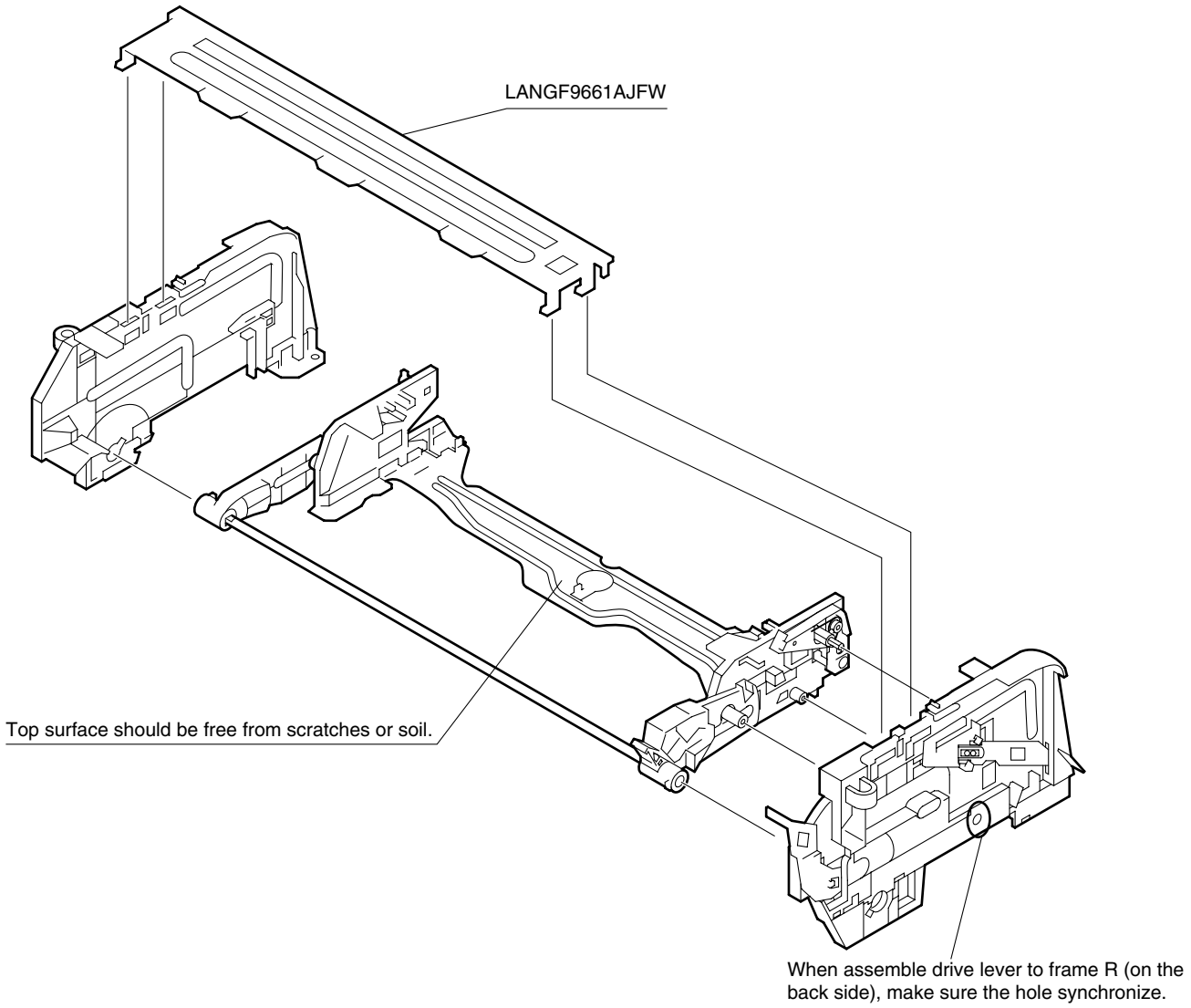
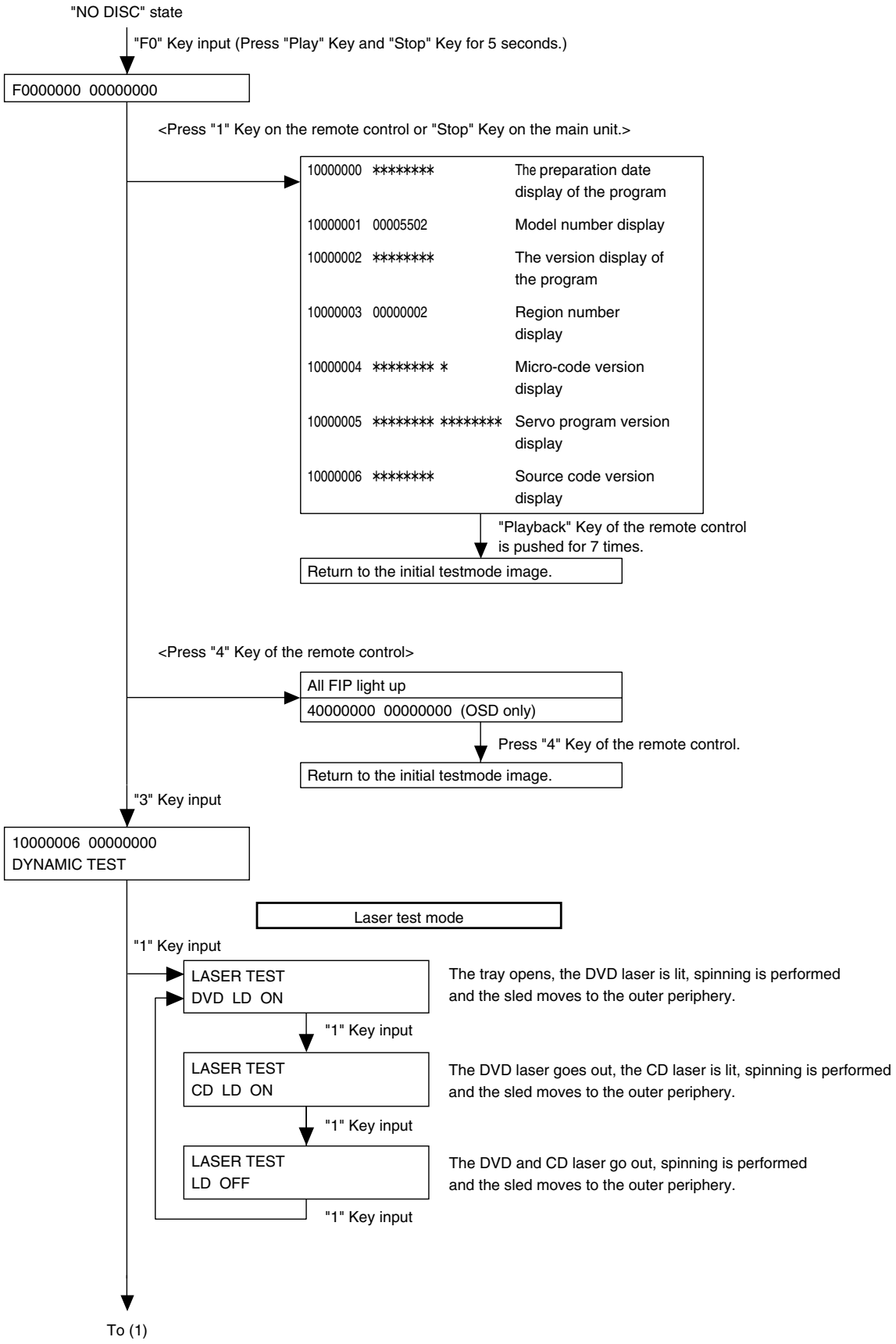
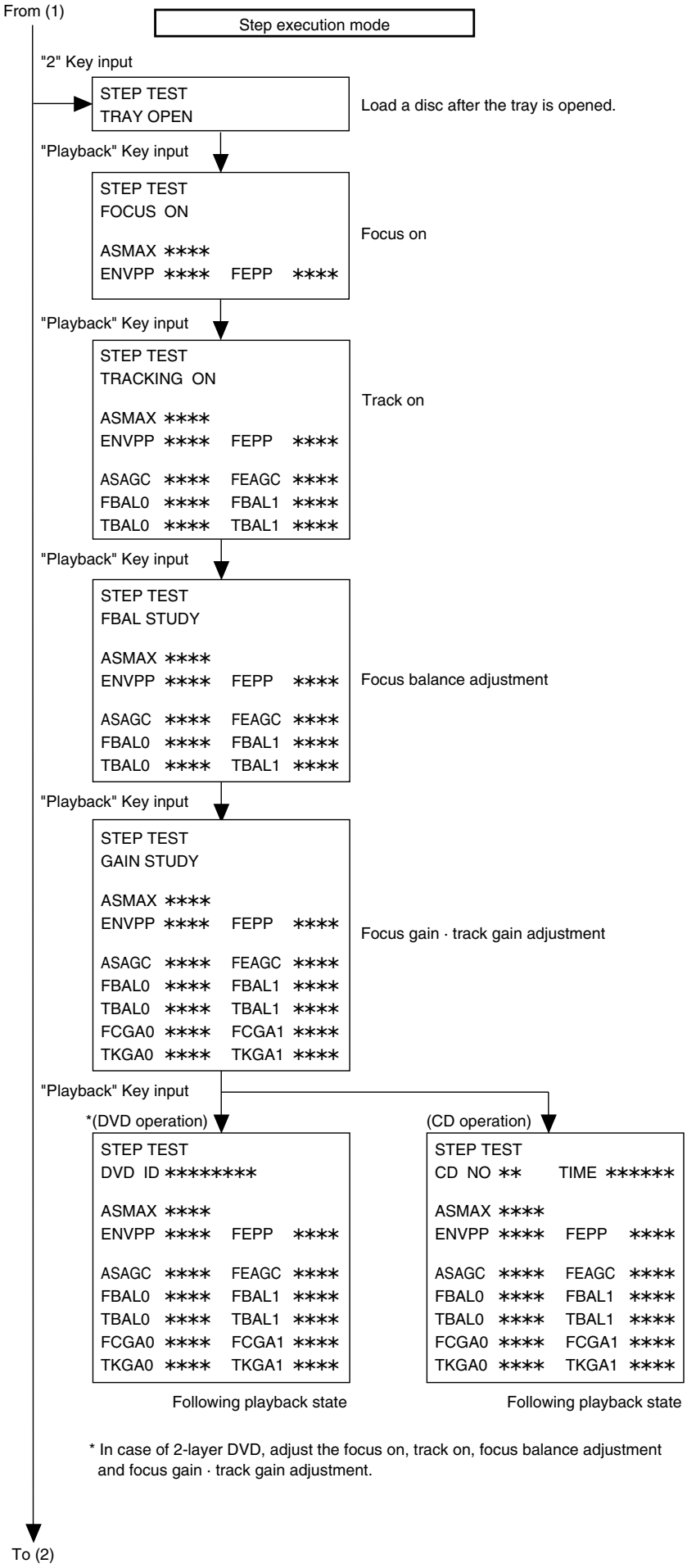


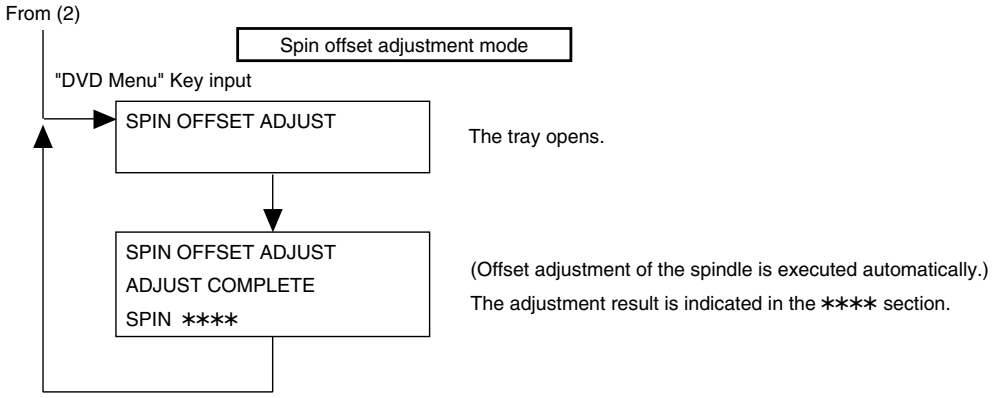
Figure 8-45.

9. TEST MODE


"NO DISC" state
"F0" Key input (Press "Play" Key and "Stop" Key for 5 seconds.)
F0000000 00000000
<Press "1" Key on the remote control or "Stop" Key on the main unit.>
10000000 ******** The preparation date display of the program
10000001 00005502 Model number display
10000002 ******** The version display of the program
10000003 00000002 Region number display
10000004 ******** * Micro-code version display
10000005 ******** ******** Servo program version display
10000006 ******** Source code version display
"Playback" Key of the remote control is pushed for 7 times.
Return to the initial testmode image.
<Press "4" Key of the remote control>
All FIP light up
40000000 00000000 (OSD only)
Press "4" Key of the remote control.
Return to the initial testmode image.
"3" Key input
10000006 00000000
DYNAMIC TEST
Laser test mode
"1" Key input
LASER TEST
DVD LD ON
The tray opens, the DVD laser is lit, spinning is performed and the sled moves to the outer periphery.
"1" Key input
LASER TEST
CD LD ON
The DVD laser goes out, the CD laser is lit, spinning is performed and the sled moves to the outer periphery.
"1" Key input
LASER TEST
LD OFF
The DVD and CD laser go out, spinning is performed and the sled moves to the outer periphery.
"1" Key input
To (1)



* In case of 2-layer DVD, adjust the focus on, track on, focus balance adjustment and focus gain · track gain adjustment.



[ROM RENEWAL MODE]

1. A DVD itself and a personal computer are articulated as the right figure. Software for the renewal is started more.
2. A power source is put with pushing DVD's own "Playback" Key and "Halt" Key at the same time. (It keeps pushing it for 3 seconds.)

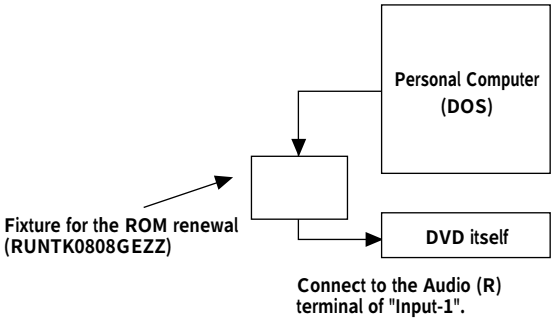
   R : OK — **It is displayed.**

3. When "Y" is inputted in accordance with the personal computer display and date transfer indication is shown and renewal process is started normally when "Enter" Key is pushed.

   W : STR — **It is displayed.**

4. When renewal is completed normally, it becomes POWER ON.

   DVD — **It is displayed.**



PART CODE	Price Code
RUNTK0808GEZZ	CD

REPLACEMENT OF IC710 (E^2PROM)

<<Servicing precautions>>

When the IC710 (E^2PROM) has replaced, make the following reprogramming.

Depending on models, the IC710 (E^2PROM) has been factory adjusted for its memory function.

It's therefore necessary to reprogram the memory function for the model in question.

Note that the servo circuit requires readjustments for the slow and still modes.

1. Memory function reprogramming.
   a. Check the power off. (Power is standby mode.)
   b. Make for moment short-circuit test point (TP801 and TP803), located at the VCR Operation PWB.
      Be sure that all the VCR displays light up into the TEST mode.
   c. Using the CHANNEL (+) and (-) buttons, select the right function numbers from JP0 to JP39, which appear in the VCR LCD display, referring to the E^2PROM map.
      Press the DISPLAY button to pickup the fuctions (ON) and the CLEAR button to discard the functions (OFF).
      DISPLAY and CLEAR buttons are located on the remote control unit.
      * When the DISPLAY button has been pressed (ON), the memory function number starts flashing.
      * When the CLEAR button has been pressed (OFF), the memory function number lights up.
   d. Example: "ON" and "OFF" are taken as "1" and "0" respectedly.
      The numbers JP0 to JP39 are divided into four groups and each group's setting is displayed in hexadecimal notation.

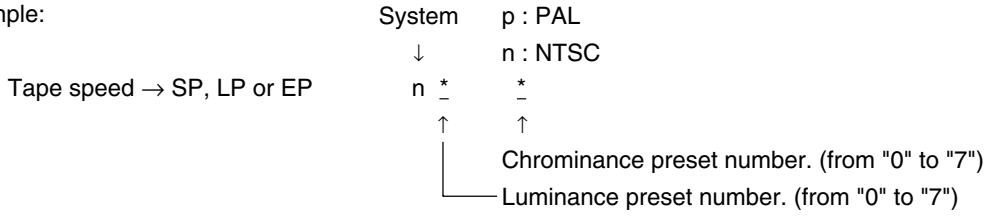
JP0	JP1	JP2	JP3	JP4	JP5	JP6	JP7	JP8	JP9	JP10	JP11	JP12	JP13	JP14	JP15	JP16	JP17	JP18	JP19	JP20	JP21	JP22	JP23	JP24	JP25	JP26	JP27
0	0	1	0	0	1	0	0	1	1	0	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	1	0
↓				↓				↓				↓				↓				↓				↓			
4				2				B				B				7				E				5			

JP28	JP29	JP30	JP31	JP32	JP33	JP34	JP35	JP36	JP37	JP38	JP39
0	1	0	0	0	1	0	0	1	1	0	0
↓				↓				↓			
2				2				3			

Also recording level preset number selected from the ten keys on the remote control unit which appear in the VCR LCD display, referring to the E^2PROM map.

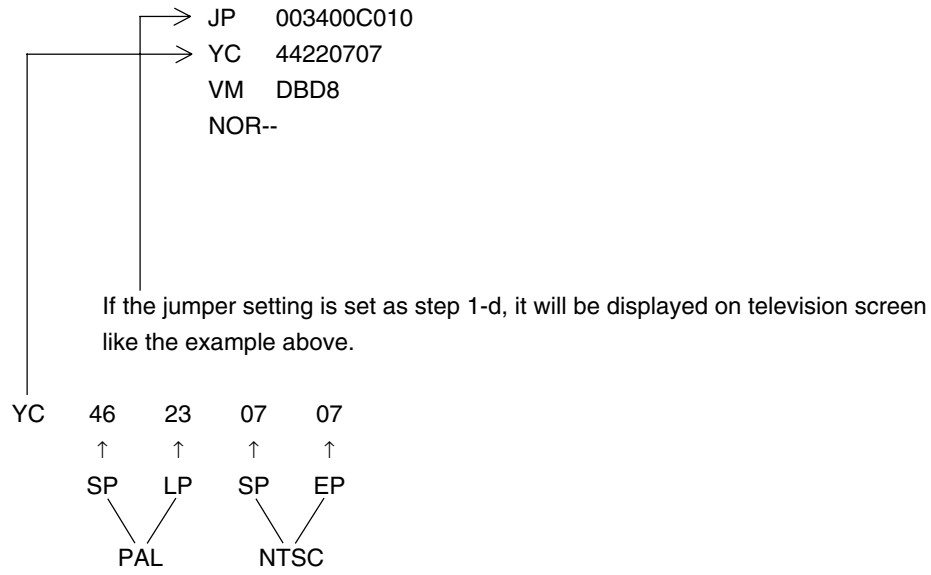
Out lights	SP p * *	LP p * *	SP n * *	EP n * *
	↑ ↑	↑ ↑	↑ ↑	↑ ↑
Blank	Selection from the ten keys. (from "0" to "7")	Selection from the ten keys. (from "0" to "7").	Selection from the ten keys. (from "0" to "7")	Selection from the ten keys. (from "0" to "7")

2. Memory recording preset level reprogramming.
   a. Similarly to the above step 1-a and 1-d the same operate.
   b. Using the CHANNEL (+) and (-) buttons, select the right function numbers continued from recording preset number as has been JP0~JP39, which appear in the VCR LCD display, referring to the E^2PROM map.
   c. Example:



3. Finally make for a moment short-circuit test point (TP801 and TP803), both located at the VCR Operation PWB to clear the TEST mode.

4. Jumper setting of JP0 to JP39 in hexadecimal notation and REC current setting.
   a. Check the power on. (Power is ON.)
   b. Make short-circuit test point (TP801 and TP803) and hold the point.
      Be sure that all the VCR LCD displays light up into the TEST mode.
   c. The jumper setting in hexadecimal notation and REC current setting will be displayed on the television screen (upper left).
   d. Example:



5. Finally release the test point to return to normal screen (E-E mode).

E²PROM MAP

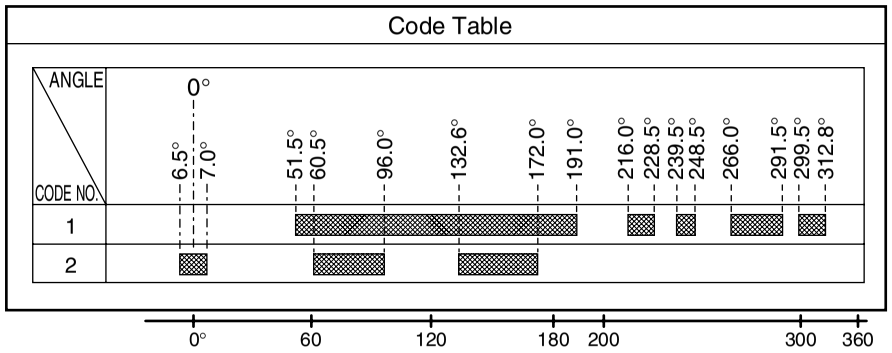
Jumper No.	Model Name / Jumper Name	DV-NC65S	DV-NC65H	DV-NC70H
JP0	Colour0	1	0	0
JP1	Colour1	0	0	0
JP2	VPS/PDC	1	1	1
JP3	OEM	0	0	0
JP4	Low power	0	0	0
JP5	X400 FF/REW	1	1	1
JP6	System0	0	0	0
JP7	System1	0	0	0
JP8	Tuner0	0	1	1
JP9	Tuner1	0	1	1
JP10	Tuner2	0	0	0
JP11	RF_out_set_off	1	1	1
JP12	Dual scart	1	1	1
JP13	Front AV	1	1	1
JP14	LP	0	0	0
JP15	EP	1	1	1
JP16	G-CODE0	1	1	1
JP17	G-CODE1	0	1	1
JP18	NICAM	1	1	1
JP19	IGR	1	0	0
JP20	Surround	0	0	0
JP21	Decoder	1	1	1
JP22	Sort	1	1	1
JP23	Hifi	1	1	1
JP24	16:09	1	1	1
JP25	Sat_ctl	0	0	0
JP26	Post_code	0	1	1
JP27	DNR	0	0	0
JP28	R/C 1-2	0	0	0
JP29	Posi84	1	1	1
JP30	Internal_Sat_ctl	0	0	0
JP31	Gamma	0	0	0
JP32	HEAD0	0	0	0
JP33	HEAD1	1	1	1
JP34	HEAD2	0	0	0
JP35	NTSC SKEW	0	0	0
JP36	NTSC_PB	1	1	1
JP37	SQPB	1	1	1
JP38	Slow_Atr_off	0	0	0
JP39	Audio insert	0	0	0
	PAL SP	46	46	46
	PAL LP	23	23	23
	NTSC SP	07	07	07
	NTSC EP	07	07	07
	DISPLAY	528BDE1223	42BB7E5223	42BB7E5223

0: LIGHT UP 1: FLASHING

10. MECHANISM OPERATION FLOWCHART AND TROUBLESHOOTING GUIDE

MECHANISM OPERATION FLOWCHART

* This flowchart describes the outline of the mechanism's operation, but does not give its details.

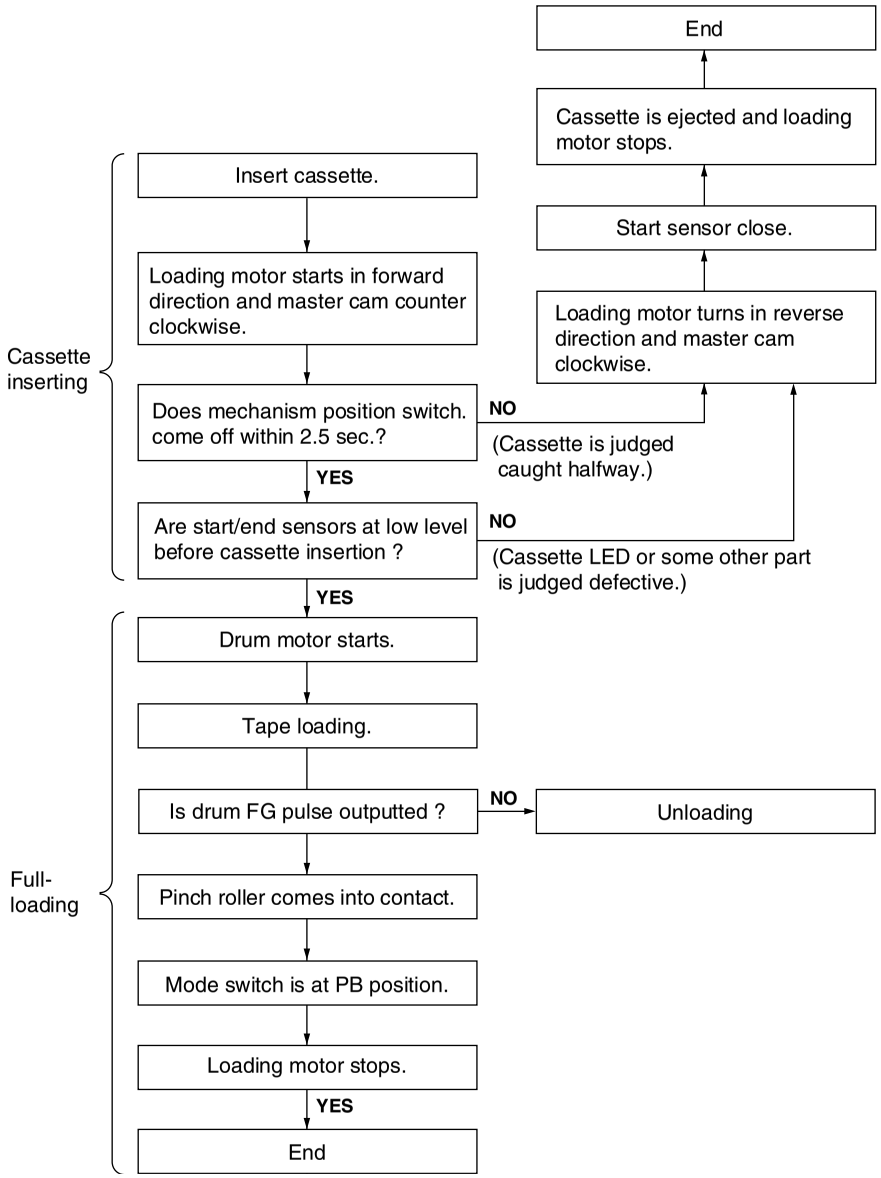


	EJ					UL					PU		PU2		VSR			PB	SLW			FF	STP
Code 1	0	0	0	0	0	1	1	1	1	1	1	1	1	0	1	1	0	1	0	0	1	1	0	1	1	0
Code 2	1	1	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S Sensor	1	1	0	1	1 or 0																					

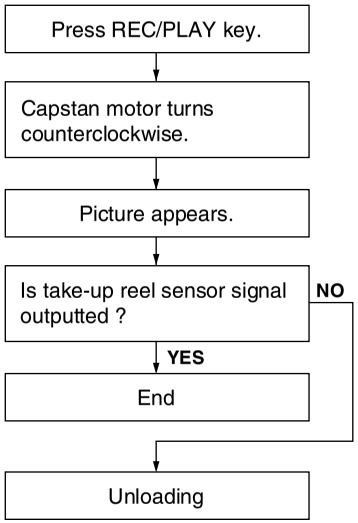
S Sensor: Open / Close

Mecha Mode	Code 1	Code 2
CS/EJ	0	1
ULD	1	1
PU1	1	1
PU2	1	0
VSR	1	0
PB	0	0
SLOW	1	0
FF	1	0
STOP	0	0

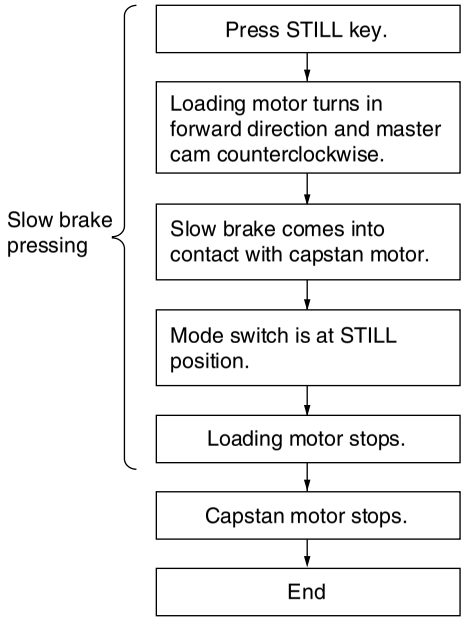
CASSETTE INSERTION → STOP



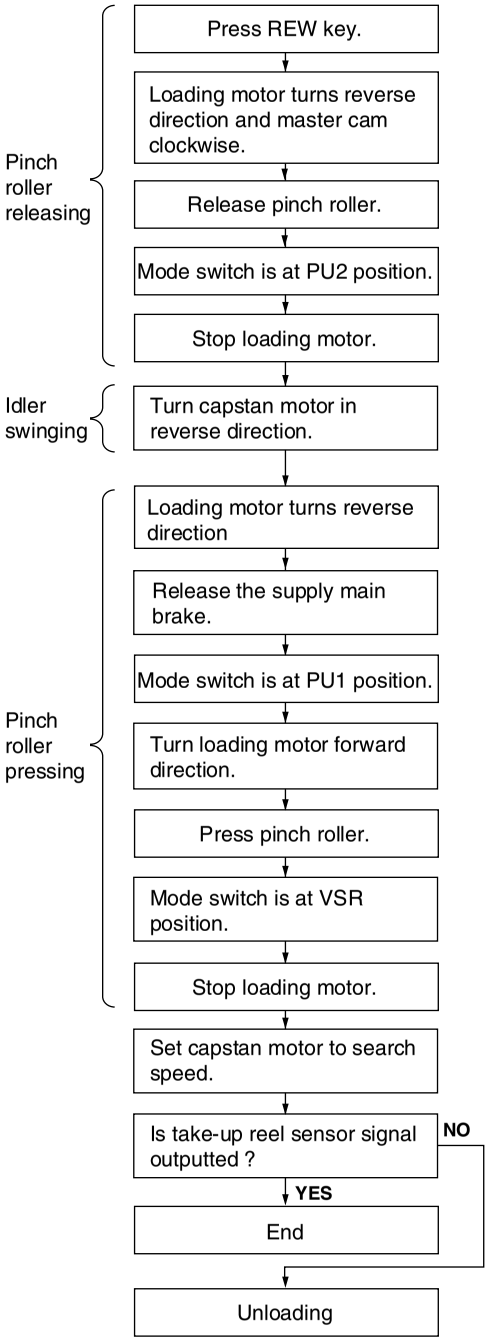
STOP → REC/PLAY



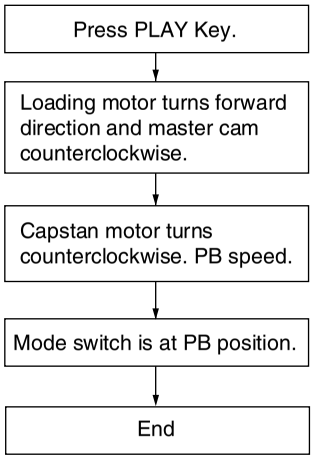
PLAY → STILL



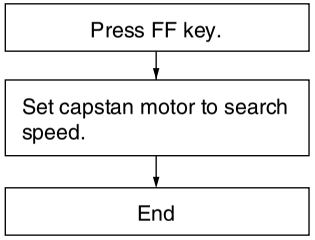
PLAY → VSR



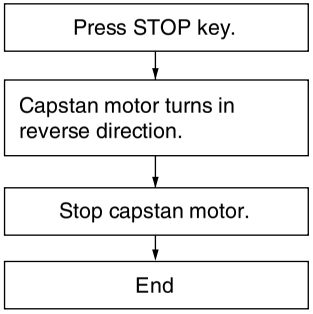
VSR → PLAY



PLAY → VSF

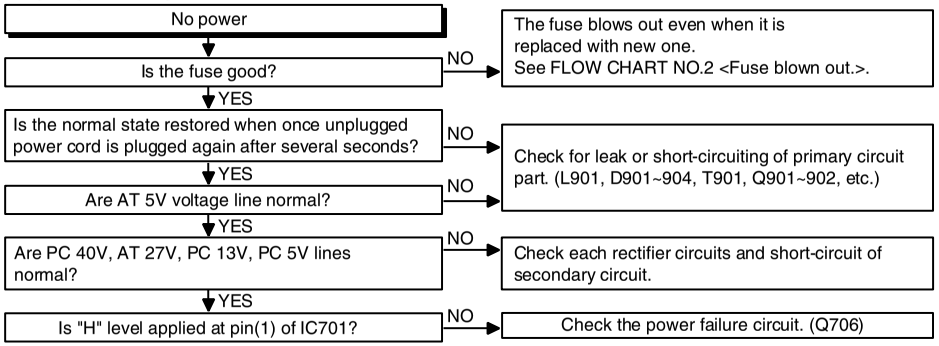


REC/PLAY → STOP

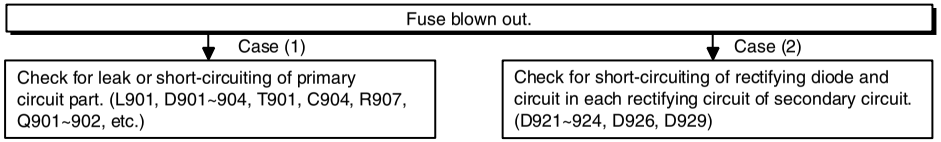


11. TROUBLESHOOTING
(VCR)

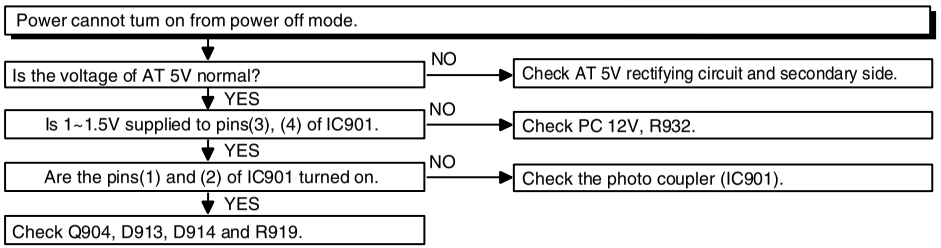
FLOW CHART NO.1



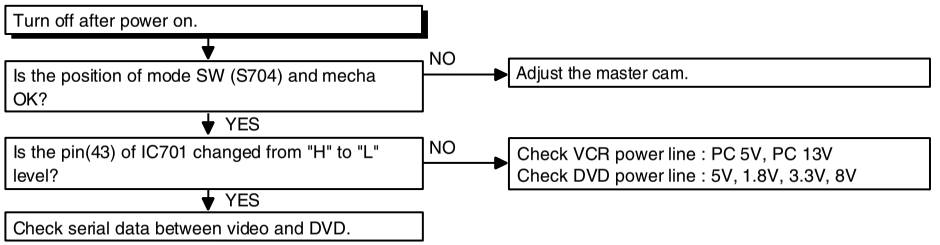
FLOW CHART NO.2



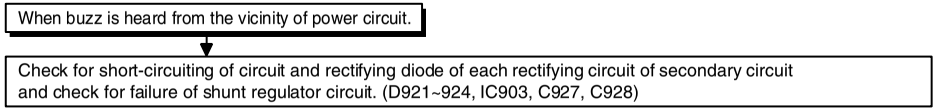
FLOW CHART NO.3



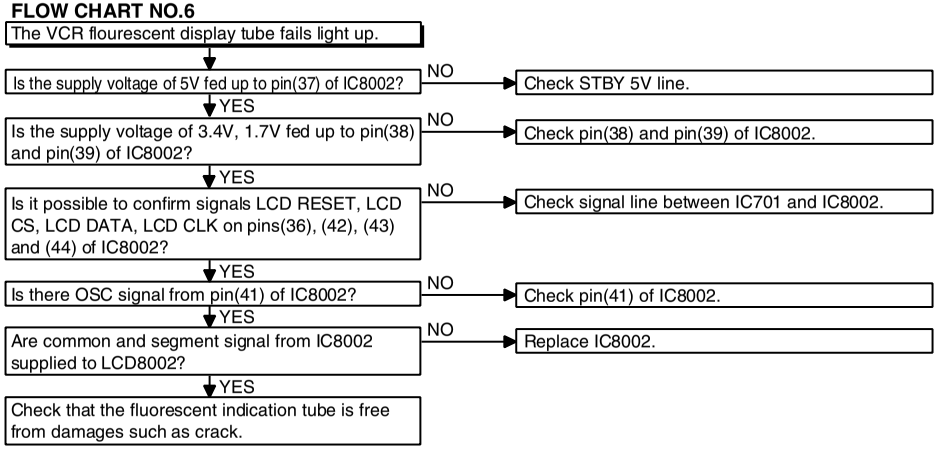
FLOW CHART NO.4



FLOW CHART NO.5



FLOW CHART NO.6

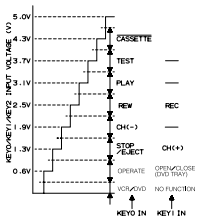


FLOW CHART NO.7

Key-in input is not received.

Does the key switch make good contact, when the cassette tape is inserted?
- NO → Check switch contact.
- YES

Is there the function control voltage inputted at the pins(88) and (89) of IC701?
- YES



Check or replace the peripheral circuit of IC701.

FLOW CHART NO.8

No operation is possible from the infrared remote control.

Operation is possible from the VCR, but no operation is possible from the infrared remote control.
- YES

Is the supply voltage of 5V fed up to pin(3) terminal of remote control receiver?
- NO → Check AT 5V lines.
- YES

Is "L" pulse sent out from pin(1) terminal of receiver when the infrared remote control is activated?
- NO → Replace the remote control receiver or replace the remote control transmitter if necessary.
- YES

Is "L" pulse inputted to pin(4) of IC701?
- NO → Check line between remote control receiver thru to pin(4) of IC701.
- YES

Replace IC701.

FLOW CHART NO.9

A cassette tape is not take in.

Are start sensor shutter go to open when the cassette tape is inserted?
- NO → Check start sensor shutter.
- YES

Does pin(87) of IC701 change from "H" to "L" level when the cassette tape is inserted?.
- NO → Check between start sensor and pin(87) of IC701.
- YES

Does pin(10) of AC connector become to "H" level (4.7V) when the cassette tape is inserted?
- NO → Check between pin(92) of IC701 and pin(10) of AC connector.
- YES

Is the specified voltage (about 10V) applied at the loading motor terminal when the cassette tape is inserted?
- NO → Replace capstan motor unit.
- YES

Replace loading motor.

FLOW CHART NO.10

A cassette tape is taken in, but ejected at once.

Does the start sensor pulse at pin(87) of IC701 change from "L" to "H" level when the cassette tape is loaded?
- NO → Check line start sensor and all the way up thru to pin(87) of IC701.
- YES

Does the end sensor pulse at pin(86) of IC701 change from "L" to "H" level when the cassette tape is loaded?
- NO → Check line end sensor and all the way up thru to pin(86) of IC701.
- YES

Does the master cam mode shifter operate normally when the cassette tape is loaded?
- NO → Check cam switch (A), (B) and all the way up thru to pins(94), (93) of IC701.
- YES

Replace IC701.

FLOW CHART NO.11

The cassette tape fails to eject.

Does the capstan motor start when the EJECT button is pressed?
- NO → See FLOW CHART NO.13. <The capstan motor fails to run.>
- YES

Does the take-up reel disk turn when the capstan motor is running?
- NO → Check reel disk and reel drive unit.
- YES

Are pulses applied at pin(2) of IC701 when the take-up reel disk is turning?
- NO → Check take-up reel sensor and all the way up thru to pin(2) of IC701.
- YES

Is a "H" level (about 4.7V) applied at pin(10) of AC connector when a reel pulse has been inputted?
- NO → Check pin(92) of IC701.
- YES

Is the specified voltage applied at the loading motor terminal?
- NO → Change the capstan motor unit.
- YES

Does the loading motor run?
- NO → Replace loading motor.
- YES

Replace cassette cam, gear, etc.

FLOW CHART NO.12

No power is turned on.

Does power control(H) signal at pin(96) of IC701 change from "L" to "H" level?
- NO → Check IC701.
- YES

Does the base of Q1905 change from about 5V to 4.5V?
- NO → Check the pin(96) of IC701 and all the way up thru to Q1905.
- YES

Is 5V sent out of the emitter of Q1905?
- NO → Check Q1905 and the AT 5V line.

FLOW CHART NO.13

The capstan motor fails to run.

- Is the voltage more than about 2.6V DC given out of pin(29) of IC701?
  - NO → Check IC701.
  - YES ↓
- Is the supply voltage of 5V fed up to pin(3) of AC connector?
  - NO → Check PC 5V line.
  - YES ↓
- Is the voltage more than 2.6V DC sent in pin(9) of AC connector?
  - NO → Check between the pin(9) of AC connector and all the way up thru to pin(29) of IC701.
  - YES ↓
- Is approx. 3.5V applied to the pin(5) of AC connector?
  - NO → Check the pin(91) of IC701.
  - YES ↓
- Is 29V applied to the pin(2) of AC connector normally?
  - NO → Check AT 27V line.
  - YES ↓

Replace capstan motor.

FLOW CHART NO.14

The drum motor fails to run.

- Is the voltage more than about 2.6V DC given out of pin(30) of IC701?
  - NO → Check IC701.
  - YES ↓
- Is the supply voltage of 5V fed up to pin(3) of AC connector?
  - NO → Check PC 5V line.
  - YES ↓
- Is the voltage more than about 2.6V applied at pin(12) of AC connector?
  - NO → Check between pin(30) of IC701 and all the way up to pin(12) of AC connector.
  - YES ↓
- Is the supply voltage of 12V fed up to pin(8) of AC connector?
  - NO → Check PC 12V line.
  - YES ↓

Check or replace drum motor.

FLOW CHART NO.15

The drum motor runs only for a few seconds.

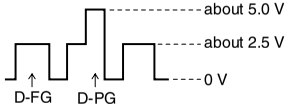
- Is drum PG/FG signal given out of pin(11) of AC connector?
  - NO → Check or replace capstan motor or drum motor.
  - YES ↓
- Is drum PG/FG signal given out of pin(65) of IC701?
  - NO → Check line between pin(11) of AC connector and all the way up thru to pin(65) of IC701.
  - YES ↓
- Is V-H.SW.P pulse given out of pin(23) of IC701?
  - NO → Check IC701.
  - YES ↓

Replace IC701.

FLOW CHART NO.16

No head switching pulse.

- Is the drum motor rotating?
  - NO → See FLOW CHART NO.14, 15.
    <The drum motor fails to run>
    <The drum motor runs only for a few seconds>
  - YES ↓
- Is the drum PG signal and drum FG signal present on pin(65) of IC701, respectively?
  - YES → Replace IC701.
  - NO ↓



- Are the drum PG/FG signals present on pin(11) of AC connector?
  - NO → Check line between pin(11) of AC connector and all the way up thru to pin(65) of IC701.
  - YES ↓

Check or replace capstan motor unit or drum motor unit.

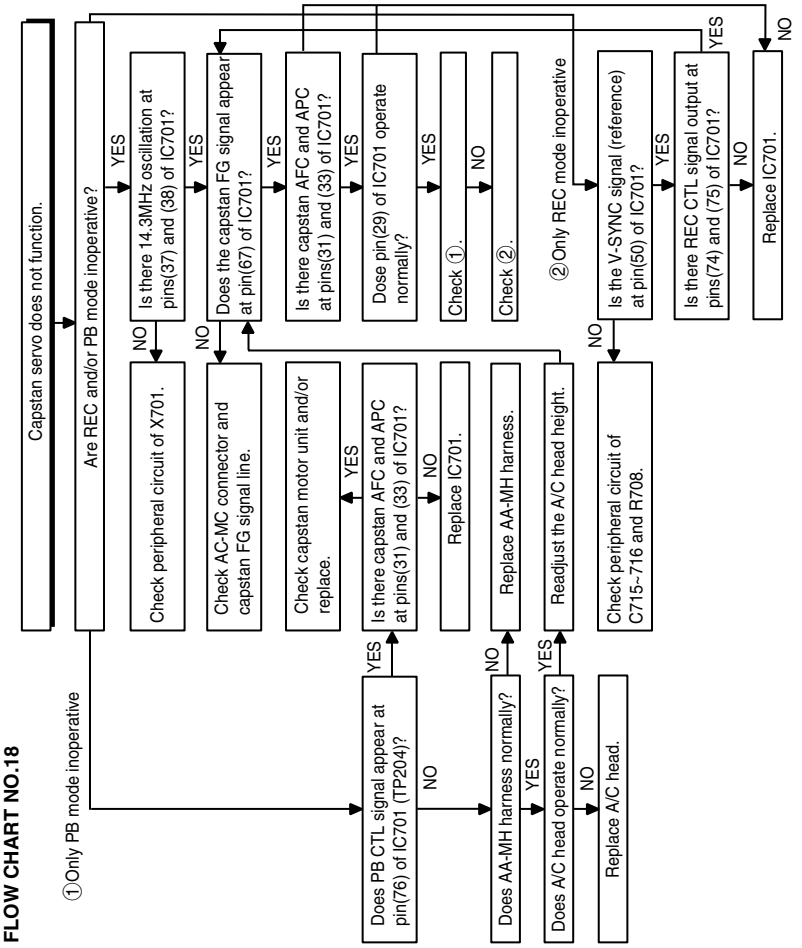
FLOW CHART NO.17

Drum servo does not function.

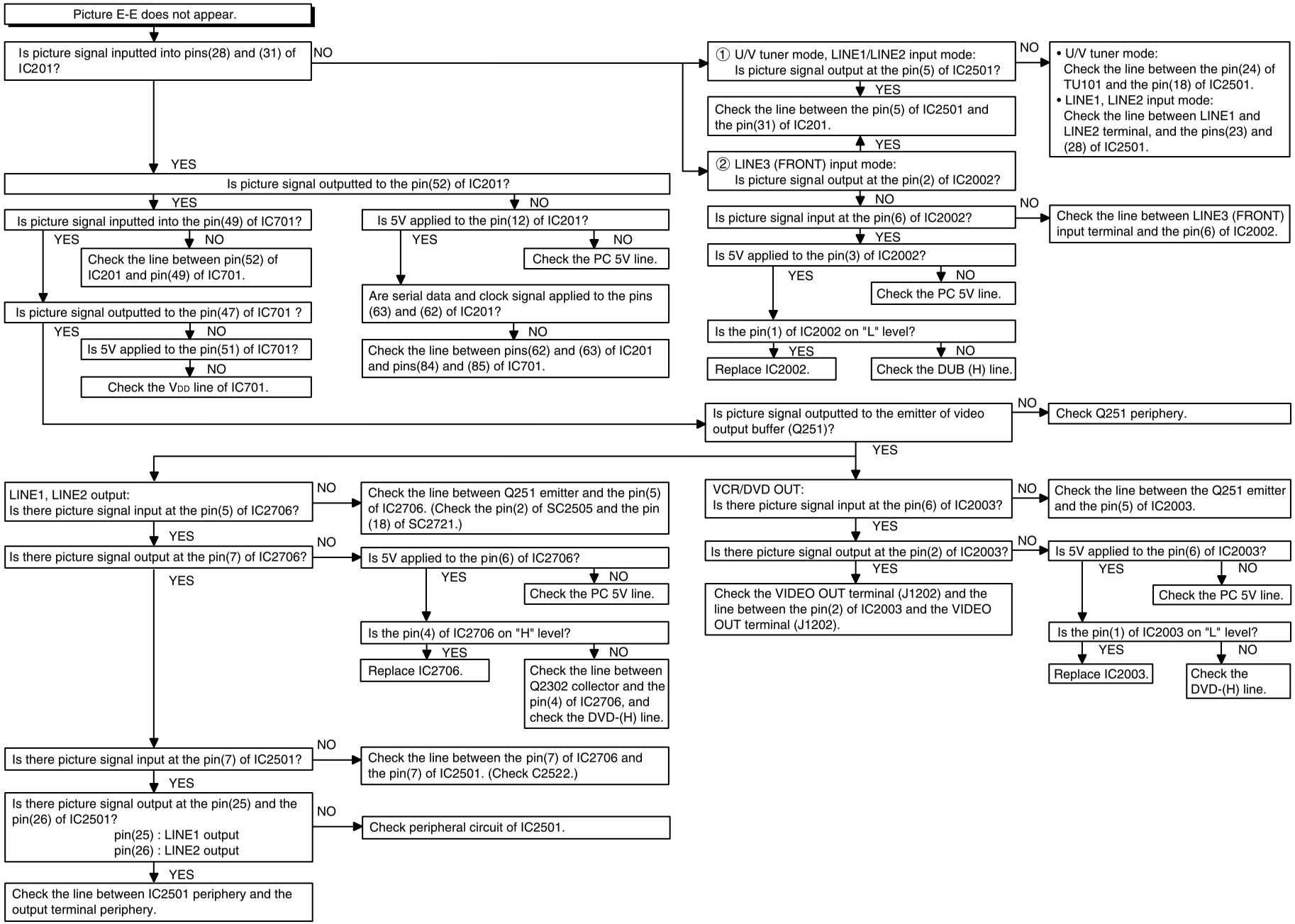
- Is there 14.3MHz oscillation at pins(37) and (38) of IC701?
  - NO → Check peripheral circuit of X701.
  - YES ↓
- In PB mode: Is there drum PG/FG signal at pin(65) of IC701 present?
  - YES ↓
  - NO → Check drum PG/FG signal line.
- In REC mode: Is there V-SYNC signal (reference) at pin(50) of IC701?
  - YES → Is there drum PG/FG signal at pin(65) of IC701 present?
  - NO → Check peripheral circuit of C715, C716 and R708.
- Is the head switching pulse at pin(23) of IC701 present?
  - NO → See FLOW CHART NO.16.
    <No head switching pulse>
  - YES ↓
- Is the drum APC output at pin(34) of IC701 and drum AFC output at pin(32) of IC701 present?
  - NO → Replace IC701.
  - YES ↓
- Is the drum control voltage applied to pin(12) of AC connector?
  - NO → Is pin(30) of IC701 in high impedance?
  - YES ↓

Replace capstan motor or drum motor.

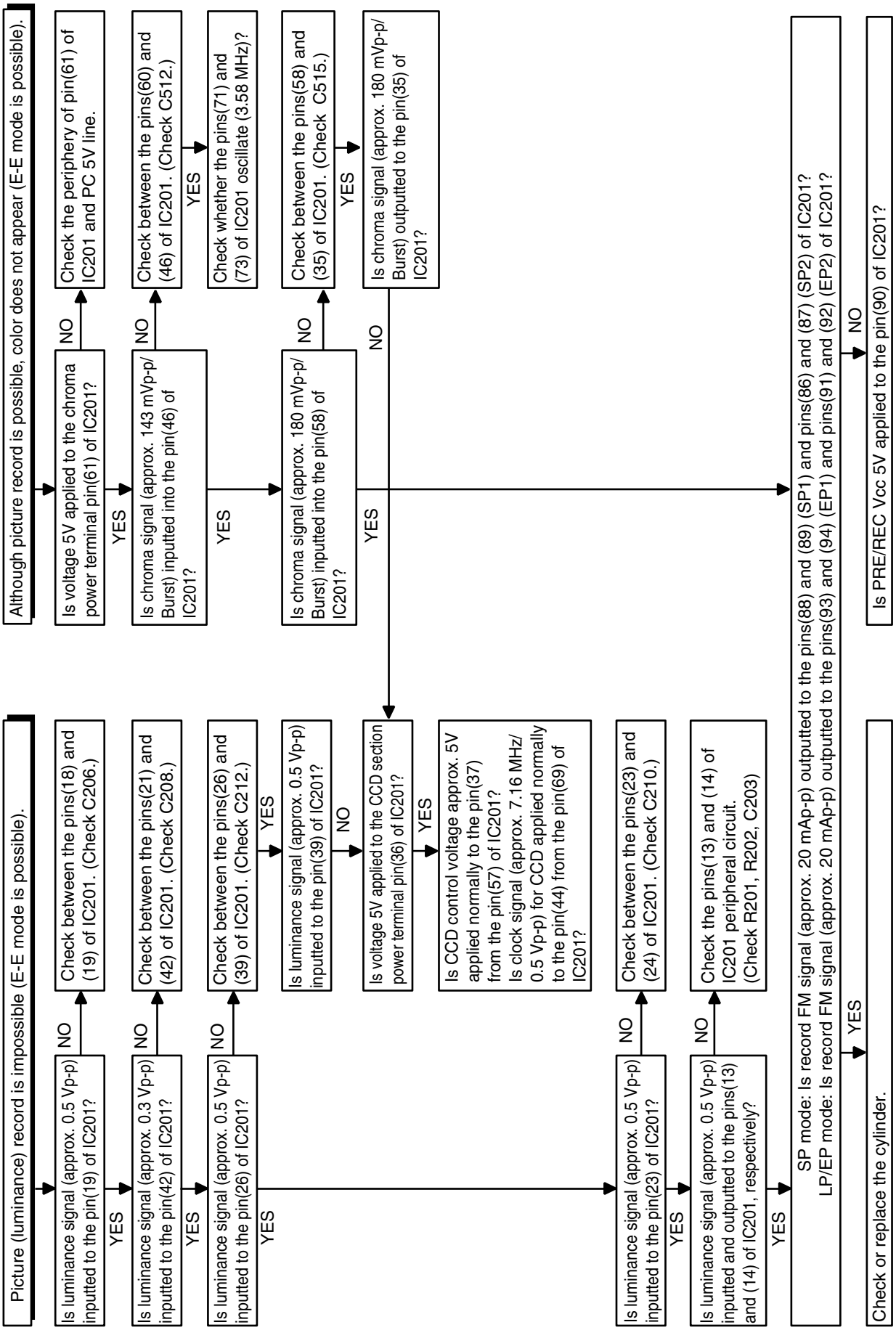
FLOW CHART NO.18



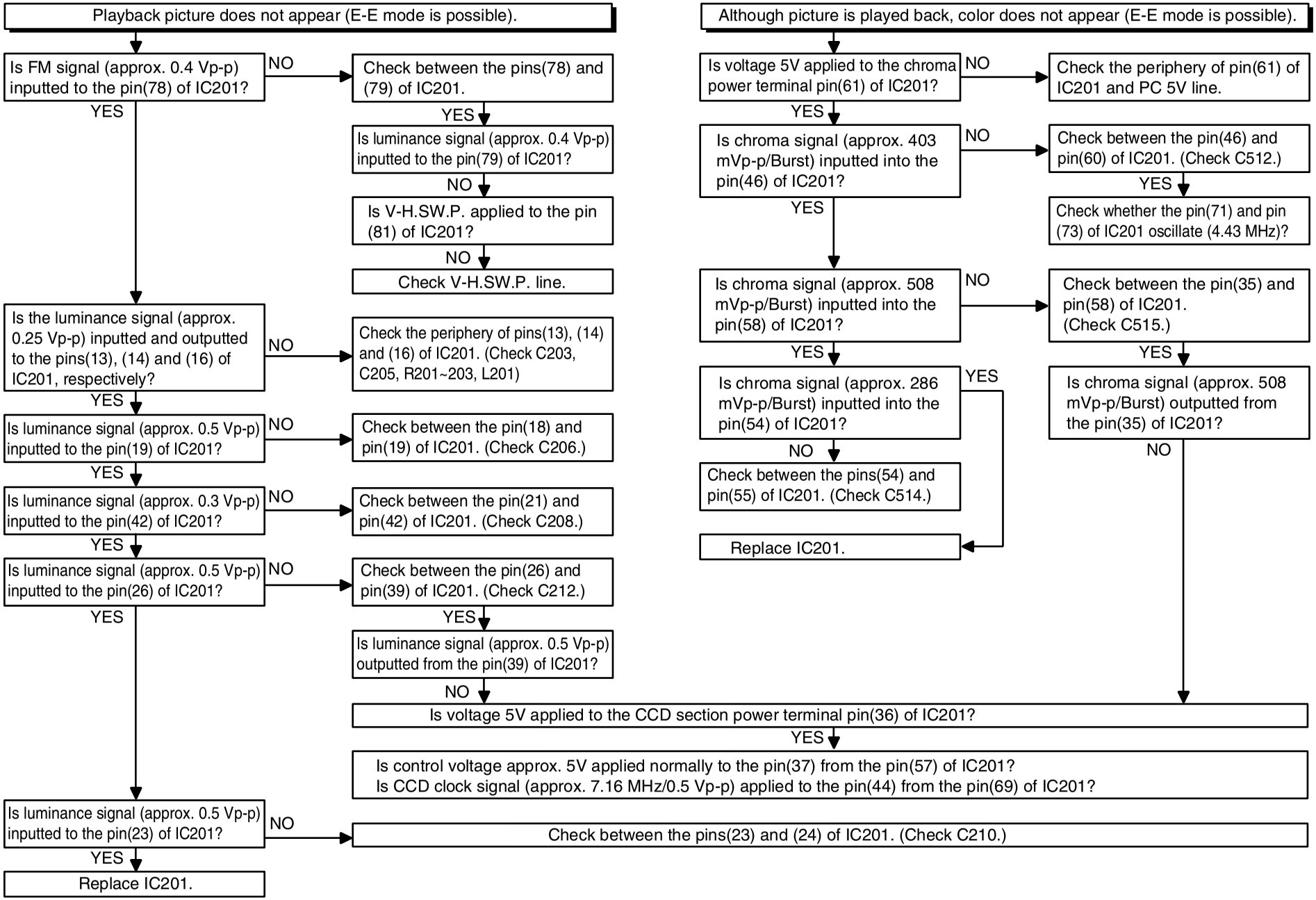
FLOW CHART NO.19



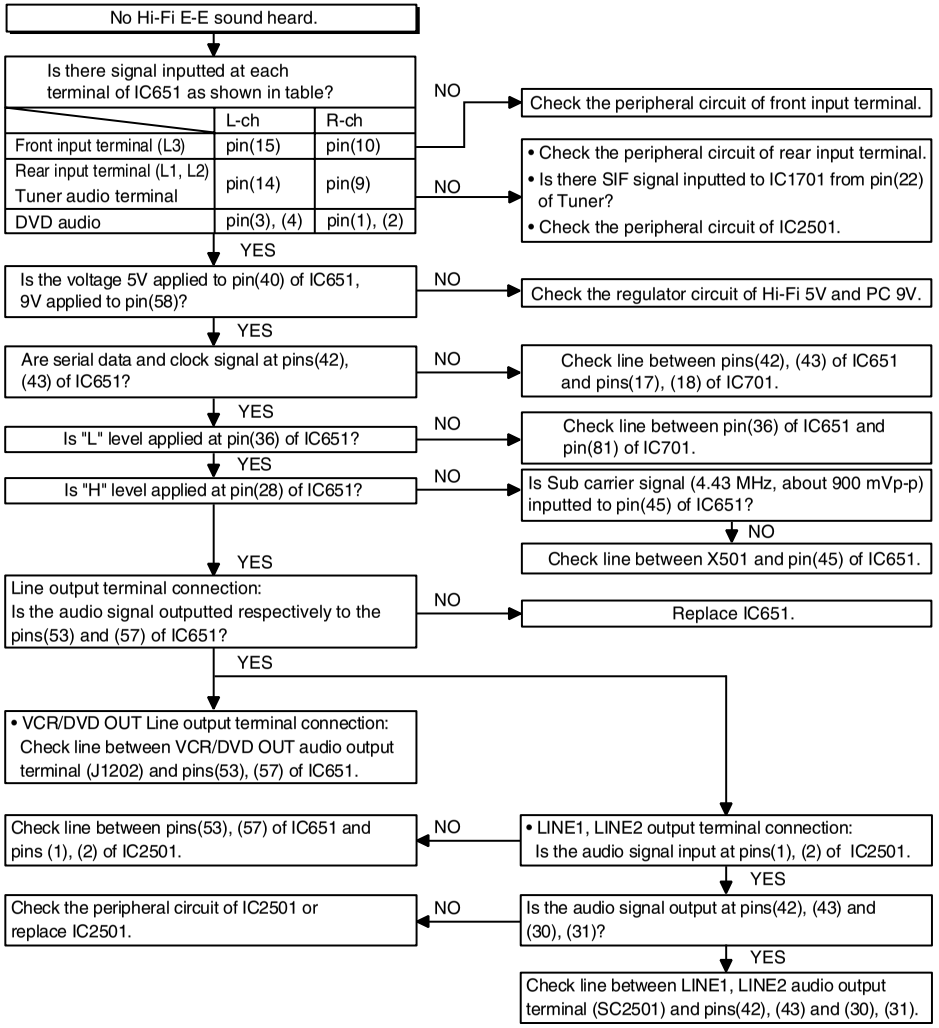
FLOW CHART NO.20



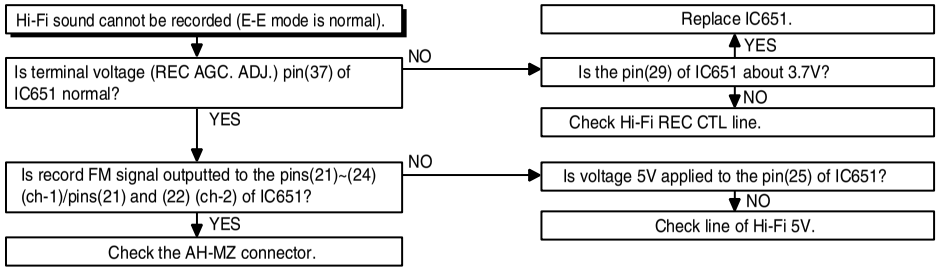
FLOW CHART NO.21



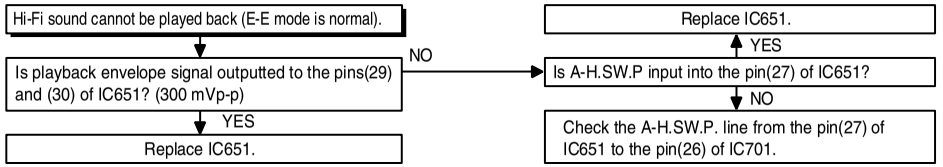
FLOW CHART NO.22



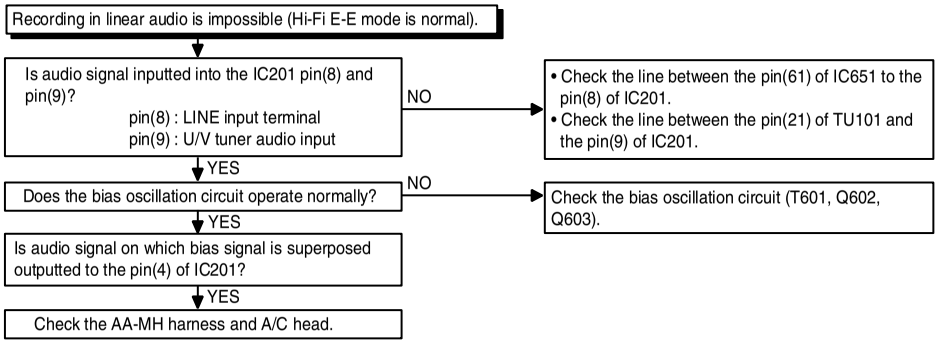
FLOW CHART NO.23



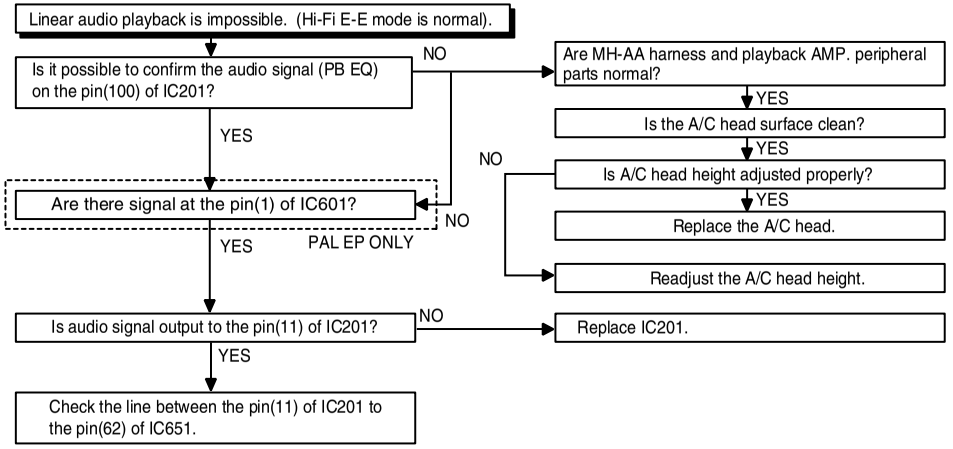
FLOW CHART NO.24



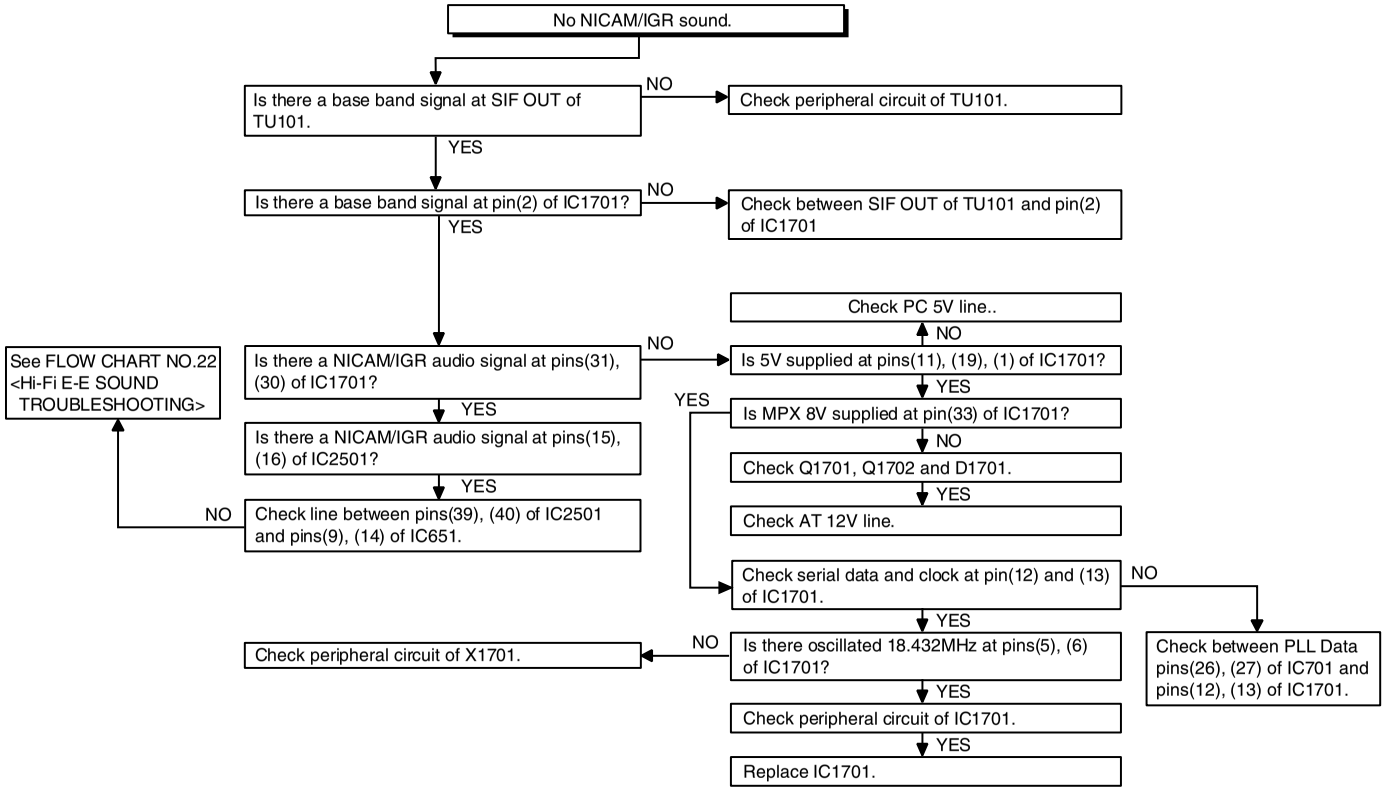
FLOW CHART NO.25



FLOW CHART NO.26



FLOW CHART NO.27: NICAM/IGR TROUBLESHOOTING



(DVD)

FLOW CHART NO.1

The fluorescent display tube does not light.

Is the supply voltage of 5V fed up to pin(37) of IC8051?
- No → Check the STBY 5V line.
- Yes ↓

Is the supply voltage of 3.4V, 1.7V fed up to pin (38), (39) of IC8051?
- No → Check the pins(38) and (39) of IC8051 and their periphery circuit.
- Yes ↓

Check the signal lines of LCD RESET, LCD CS, LCD DATA, LCD CLK on pins(36), (42), (43), (44) of IC8051.
- No → Check signal line of LCD RESET, LCD CS, LCD DATA, LCD CLK on pins(6), (12), (8) (10) of IC801.
  - Yes → Check the signal lines between IC801 and IC8051.
- No → Check signal of LCD RESET, LCD CS, LCD DATA, LCD CLK on pins(5), (13), (9), (11) of IC801.
  - Yes → Check or replace IC801.
- Check signal line between IC3501 and IC801.
- Yes ↓

Is the OSC signal present on pin(41) of IC8051?
- No → Check periphery circuit of pin(41) of IC8051.
- Yes ↓

Are common and segment signals supplied from IC8051 (LCD driver IC) to LCD8052 (LCD)?
- No → Replace IC8051.
- Yes ↓

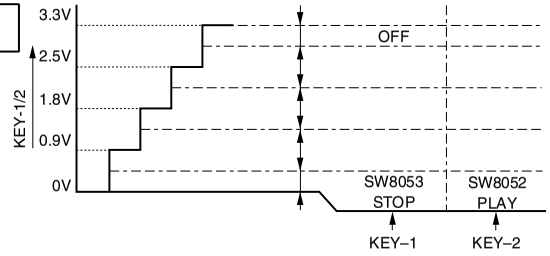
Check that the flourescent display tube is free from damages.

FLOW CHART NO.2

The key operation is disabled.

Is key switch contact and installation state normal?
- No → Replace key switch.
- Yes ↓

Is the control voltage normally into the pins(72), (73) of IC3501?



FLOW CHART NO.3

No operation is possible from the infrared remote control.

Operation is possible from the DVD, but no operation is possible from the infrared remote control.
- No → Replace the remote control receiver or replace the remote control transmitter if necessary.
- Yes ↓

Is 5V voltage supplied to the pin(3) terminal of remote control receiver?
- No → Check AT 5V line.
- Yes ↓

Is the "L" pulse sent out from pin(1) terminal of receiver when the infrared remote control is activated?
- No → Replace the remote control receiver.
- Yes ↓

Is pulse signal supplied to the pin(42) of IC3501?
- No → Check the line between the remote control receiver and the pin(42) of IC3501.
- Yes → Replace IC3501.

FLOW CHART NO.4

The disc tray cannot be opened and closed.

Is the LOAD signal inputted to R3763?
- No → Check pin(61) of IC3701. Check LOAD signal line between IC3701 and IC3704.
- Yes ↓

Is loading motor drive voltage outputted from the pins(11) and (12) of IC3704?
- No → Check IC3704.
  - Yes → Replace IC3704.
- Yes ↓

Is the loading motor drive voltage applied to the terminal of loading motor?
- No → Check the line between the IC3704 and the loading motor. Check CN3702.
- Yes ↓

Check for mechanism and gear engagement and breakage.

FLOW CHART NO.5

The [No Disc] indication. (In case of focus error)

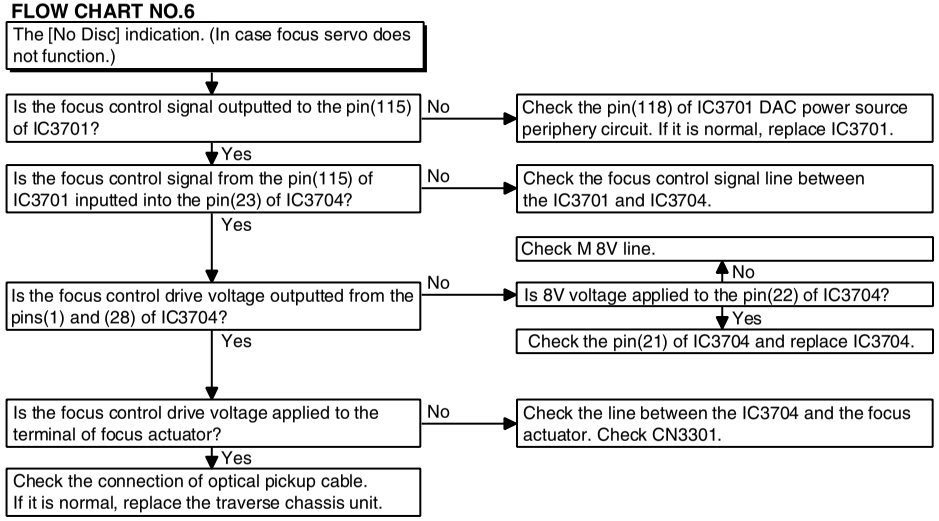
Does the optical pickup move up and down after the disc is removed? (Checking of symptom.)
- No → See FLOW CHART NO.6. <The [No Disc] indication. (In case focus servo does not function.)>
- Yes ↓

Is FE signal outputted from the pin(22) of IC3301 when the disc is set?
- No → Is there input signal on the pins(49), (50), (51), (52) of IC3301?
  - No → Check the connection of optical pickup cable. If it is normal, replace the optical pickup.
  - Yes → Replace IC3301.
- Yes ↓

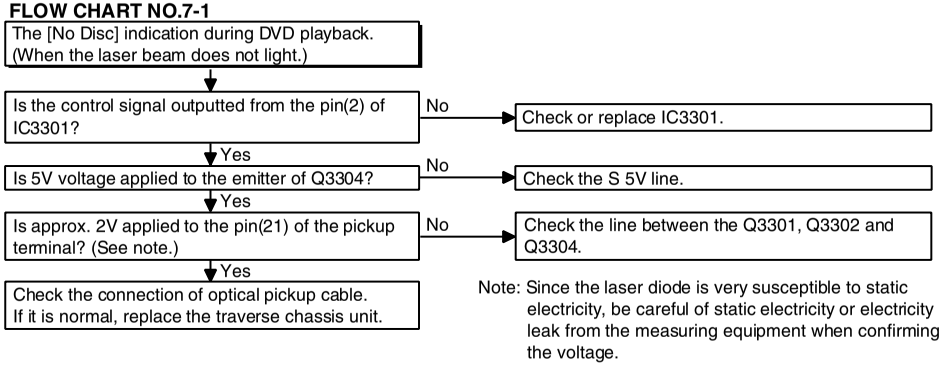
Is FE signal inputted into the pin(117) of IC3701?
- No → Check the line between the IC3301 and IC3701.
- Yes ↓

Check or replace IC3701.

FLOW CHART NO.6

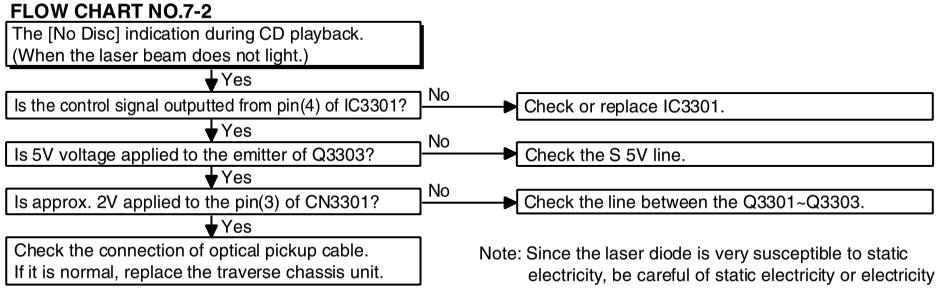


FLOW CHART NO.7-1



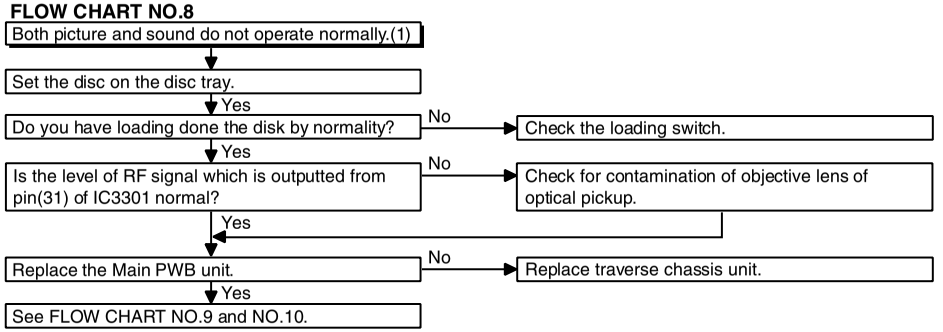
Note: Since the laser diode is very susceptible to static electricity, be careful of static electricity or electricity leak from the measuring equipment when confirming the voltage.

FLOW CHART NO.7-2

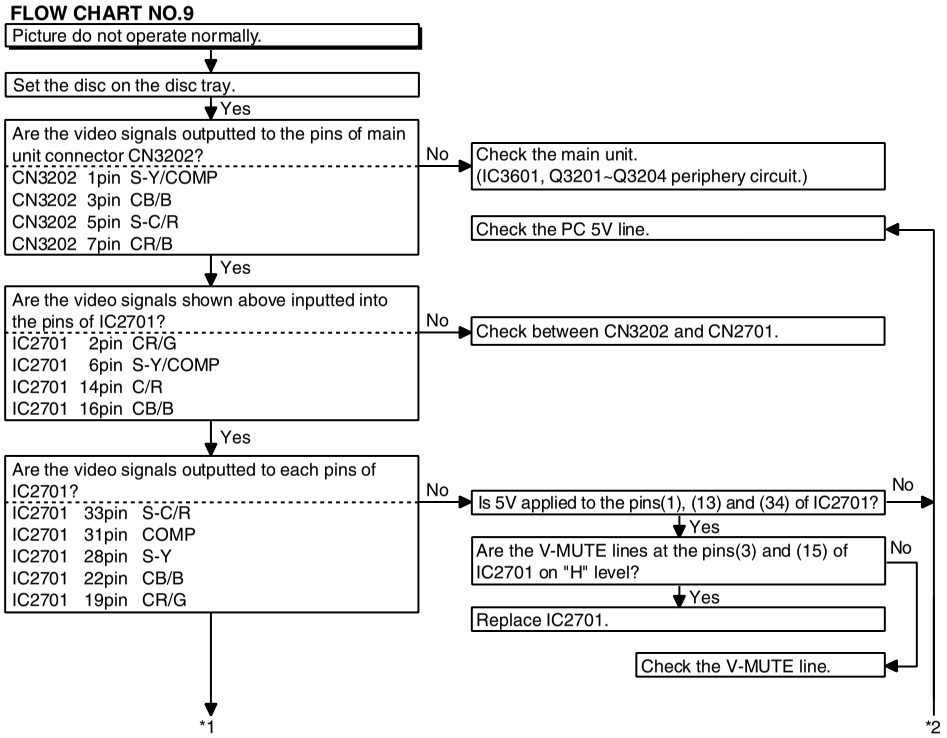


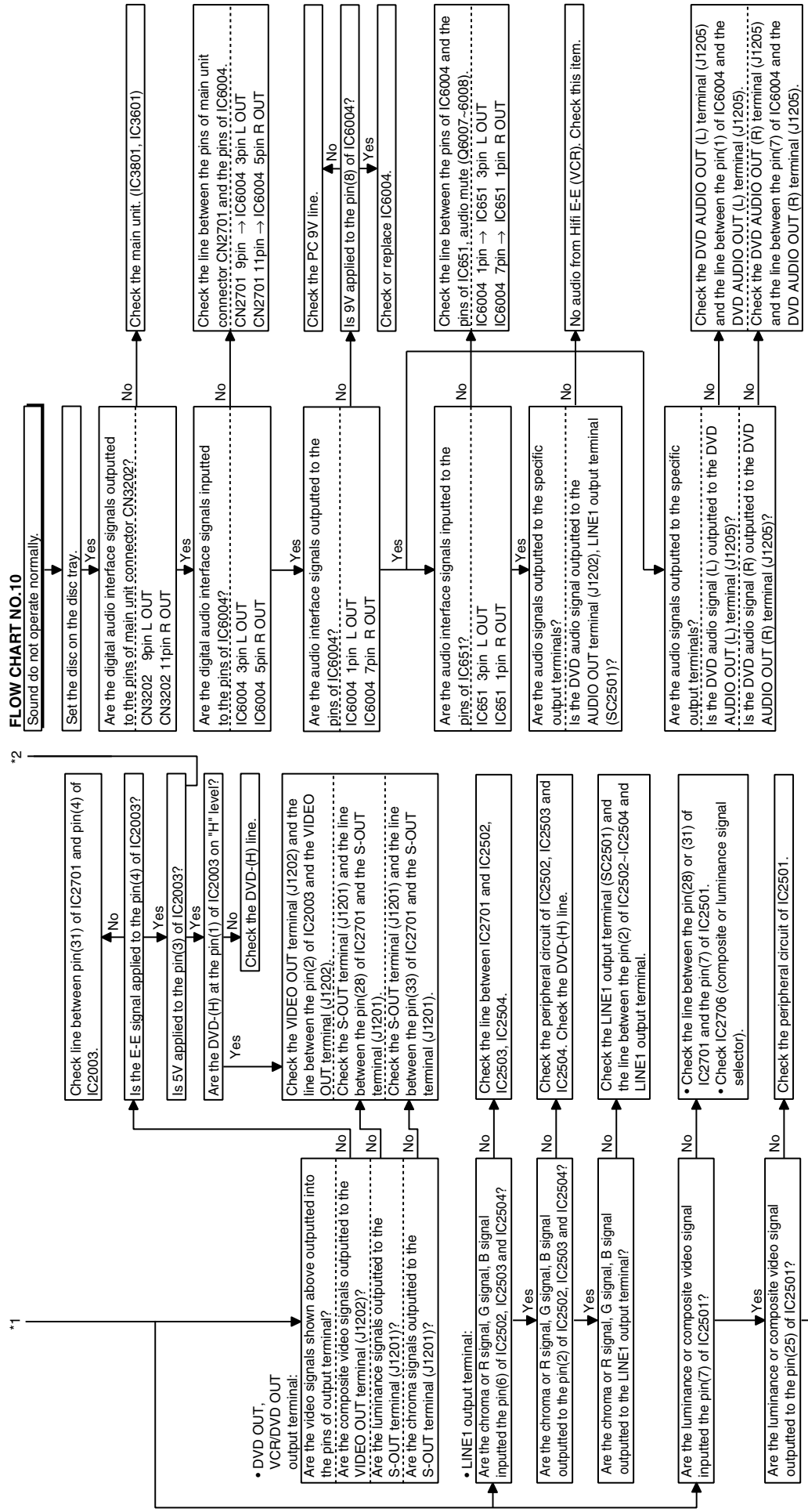
Note: Since the laser diode is very susceptible to static electricity, be careful of static electricity or electricity leak from the measuring equipment when confirming the voltage.

FLOW CHART NO.8



FLOW CHART NO.9

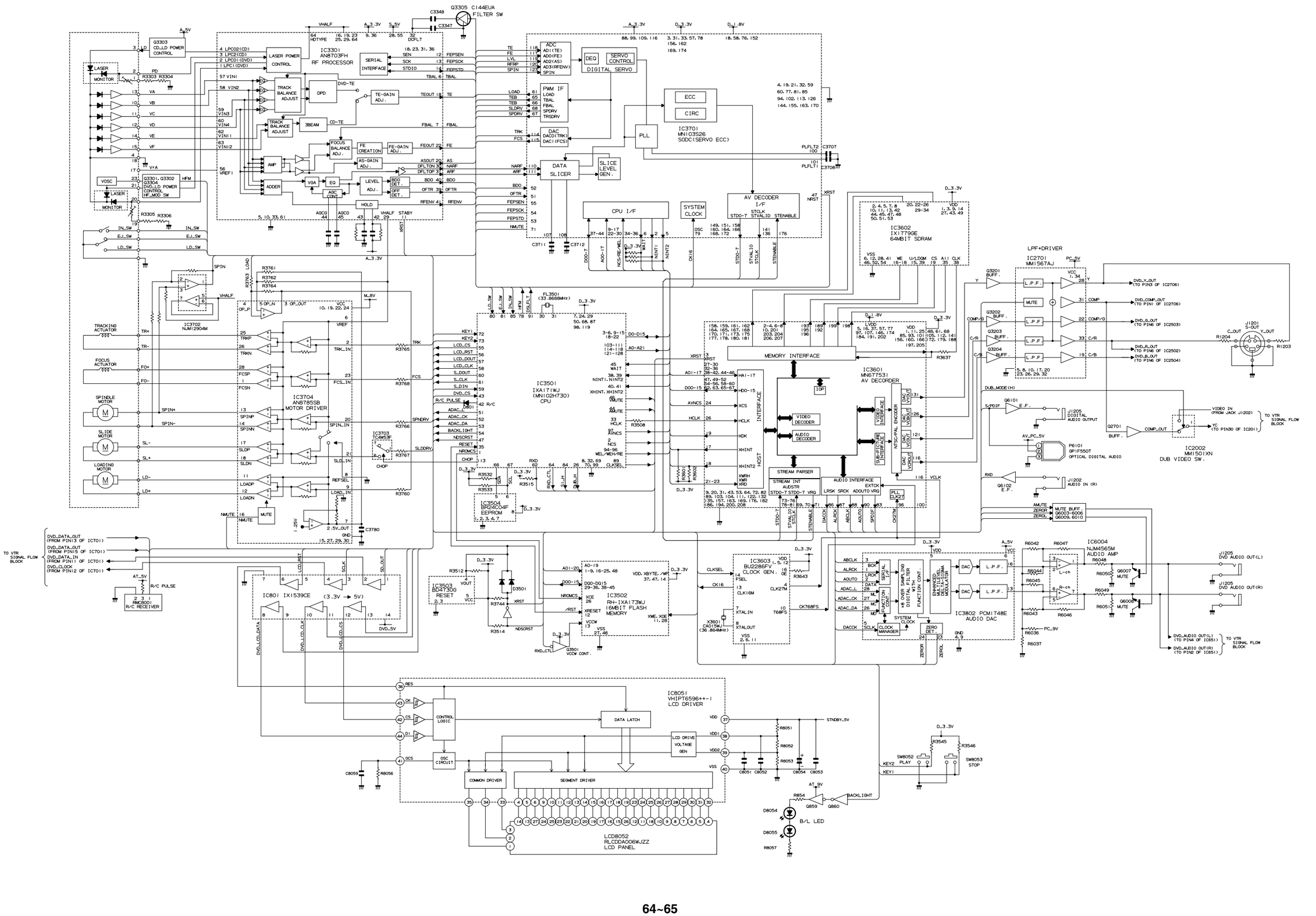



FLOW CHART NO.10
Sound do not operate normally.
Set the disc on the disc tray.
Yes
Are the digital audio interface signals outputted to the pins of main unit connector CN3202?
CN3202 9pin L OUT
CN3202 11pin R OUT
No
Check the main unit. (IC3801, IC3601)
Yes
Are the digital audio interface signals inputted to the pins of IC6004?
IC6004 3pin L OUT
IC6004 5pin R OUT
No
Check the line between the pins of main unit connector CN2701 and the pins of IC6004.
CN2701 9pin → IC6004 3pin L OUT
CN2701 11pin → IC6004 5pin R OUT
Yes
Are the audio interface signals outputted to the pins of IC6004?
IC6004 1pin L OUT
IC6004 7pin R OUT
No
Check the PC 9V line.
Yes
Is 9V applied to the pin(8) of IC6004?
No
Check or replace IC6004.
Yes
Are the audio interface signals inputted to the pins of IC651?
IC651 3pin L OUT
IC651 1pin R OUT
No
Check the line between the pins of IC6004 and the pins of IC651, audio mute (Q6007~6008).
IC6004 1pin → IC651 3pin L OUT
IC6004 7pin → IC651 1pin R OUT
Yes
Are the audio signals outputted to the specific output terminals?
Is the DVD audio signal outputted to the AUDIO OUT terminal (J1202), LINE1 output terminal (SC2501)?
No
No audio from Hifi E-E (VCR). Check this item.
Yes
Are the audio signals outputted to the specific output terminals?
Is the DVD audio signal (L) outputted to the DVD AUDIO OUT (L) terminal (J1205)?
Is the DVD audio signal (R) outputted to the DVD AUDIO OUT (R) terminal (J1205)?
No
Check the DVD AUDIO OUT (L) terminal (J1205) and the line between the pin(1) of IC6004 and the DVD AUDIO OUT (L) terminal (J1205).
No
Check the DVD AUDIO OUT (R) terminal (J1205) and the line between the pin(7) of IC6004 and the DVD AUDIO OUT (R) terminal (J1205).
*1
*2
• DVD OUT, VCR/DVD OUT output terminal:
Are the video signals shown above outputted into the pins of output terminal?
Are the composite video signals outputted to the VIDEO OUT terminal (J1202)?
Are the luminance signals outputted to the S-OUT terminal (J1201)?
Are the chroma signals outputted to the S-OUT terminal (J1201)?
No
Check line between pin(31) of IC2701 and pin(4) of IC2003.
No
Is the E-E signal applied to the pin(4) of IC2003?
Yes
Is 5V applied to the pin(3) of IC2003?
Yes
Are the DVD-(H) at the pin(1) of IC2003 on "H" level?
No
Check the DVD-(H) line.
Yes
Check the VIDEO OUT terminal (J1202) and the line between the pin(2) of IC2003 and the VIDEO OUT terminal (J1202).
Check the S-OUT terminal (J1201) and the line between the pin(28) of IC2701 and the S-OUT terminal (J1201).
Check the S-OUT terminal (J1201) and the line between the pin(33) of IC2701 and the S-OUT terminal (J1201).
• LINE1 output terminal:
Are the chroma or R signal, G signal, B signal inputted the pin(6) of IC2502, IC2503 and IC2504?
No
Check the line between IC2701 and IC2502, IC2503, IC2504.
Yes
Are the chroma or R signal, G signal, B signal outputted to the pin(2) of IC2502, IC2503 and IC2504?
No
Check the peripheral circuit of IC2502, IC2503 and IC2504. Check the DVD-(H) line.
Yes
Are the chroma or R signal, G signal, B signal outputted to the LINE1 output terminal?
No
Check the LINE1 output terminal (SC2501) and the line between the pin(2) of IC2502~IC2504 and LINE1 output terminal.
Are the luminance or composite video signal inputted the pin(7) of IC2501?
No
• Check the line between the pin(28) or (31) of IC2701 and the pin(7) of IC2501.
• Check IC2706 (composite or luminance signal selector).
Yes
Are the luminance or composite video signal outputted to the pin(25) of IC2501?
No
Check the peripheral circuit of IC2501.
Yes
Are the luminance or composite video signal outputted to the LINE1 output terminal?
No
Check the LINE1 output terminal (SC2501) and the line between the pin(25) of IC2501 and LINE1 output terminal.

- M E M O -

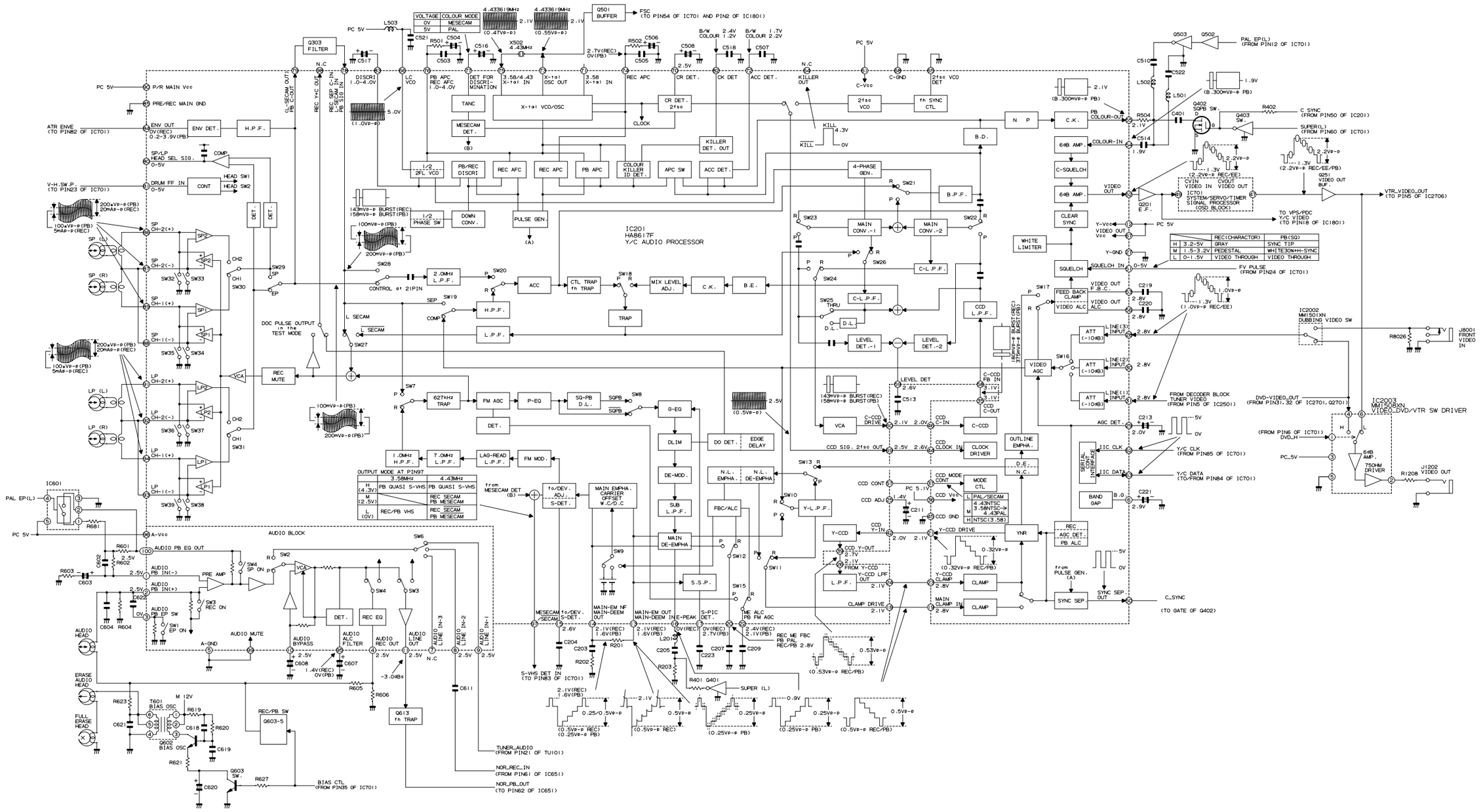
DV-NC65H/S
DV-NC70H

12. BLOCK DIAGRAMS 12-1. MAIN BLOCK DIAGRAM



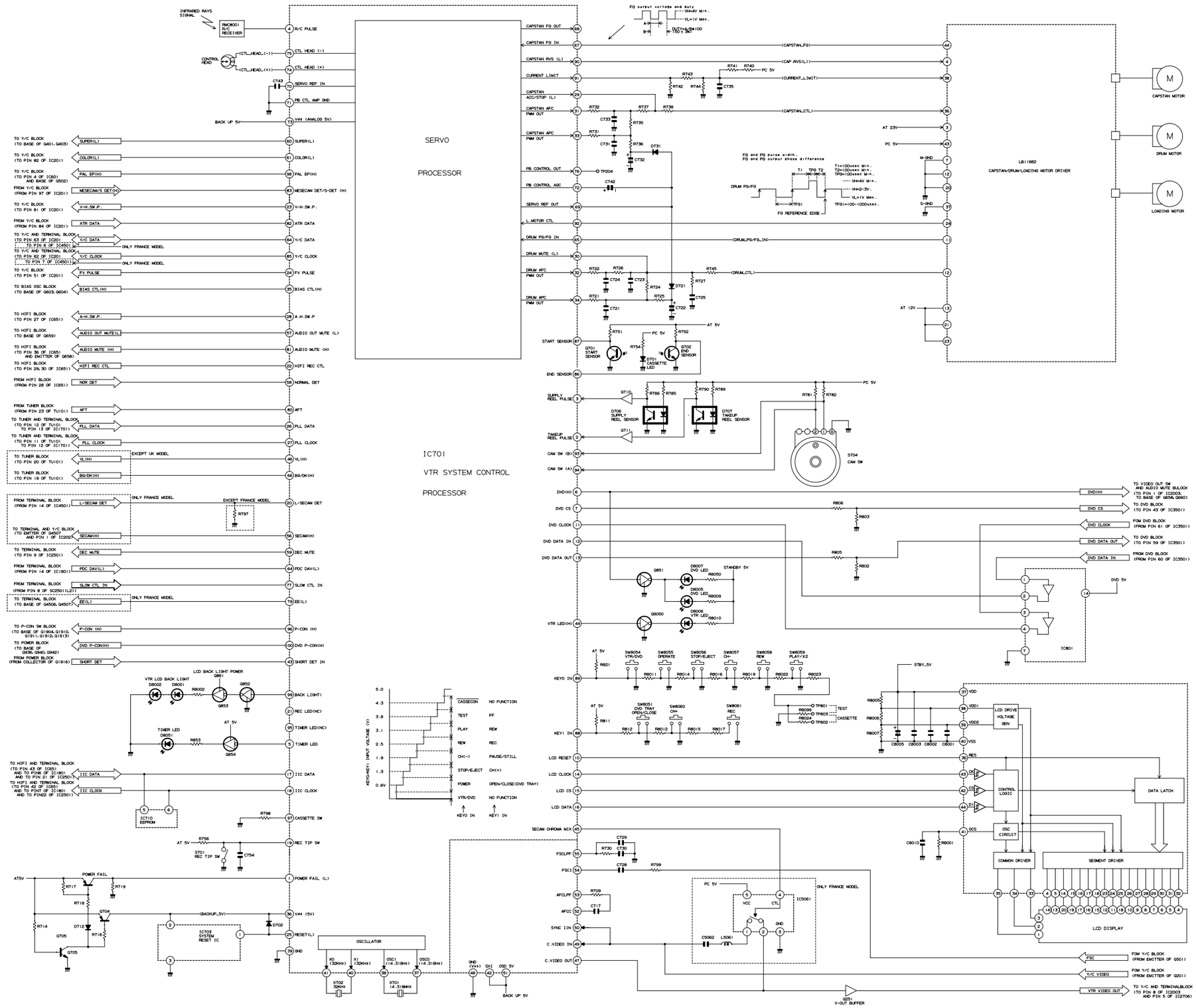
DV-NC65H/S
DV-NC70H

12-2. VCR SIGNAL FLOW BLOCK DIAGRAM



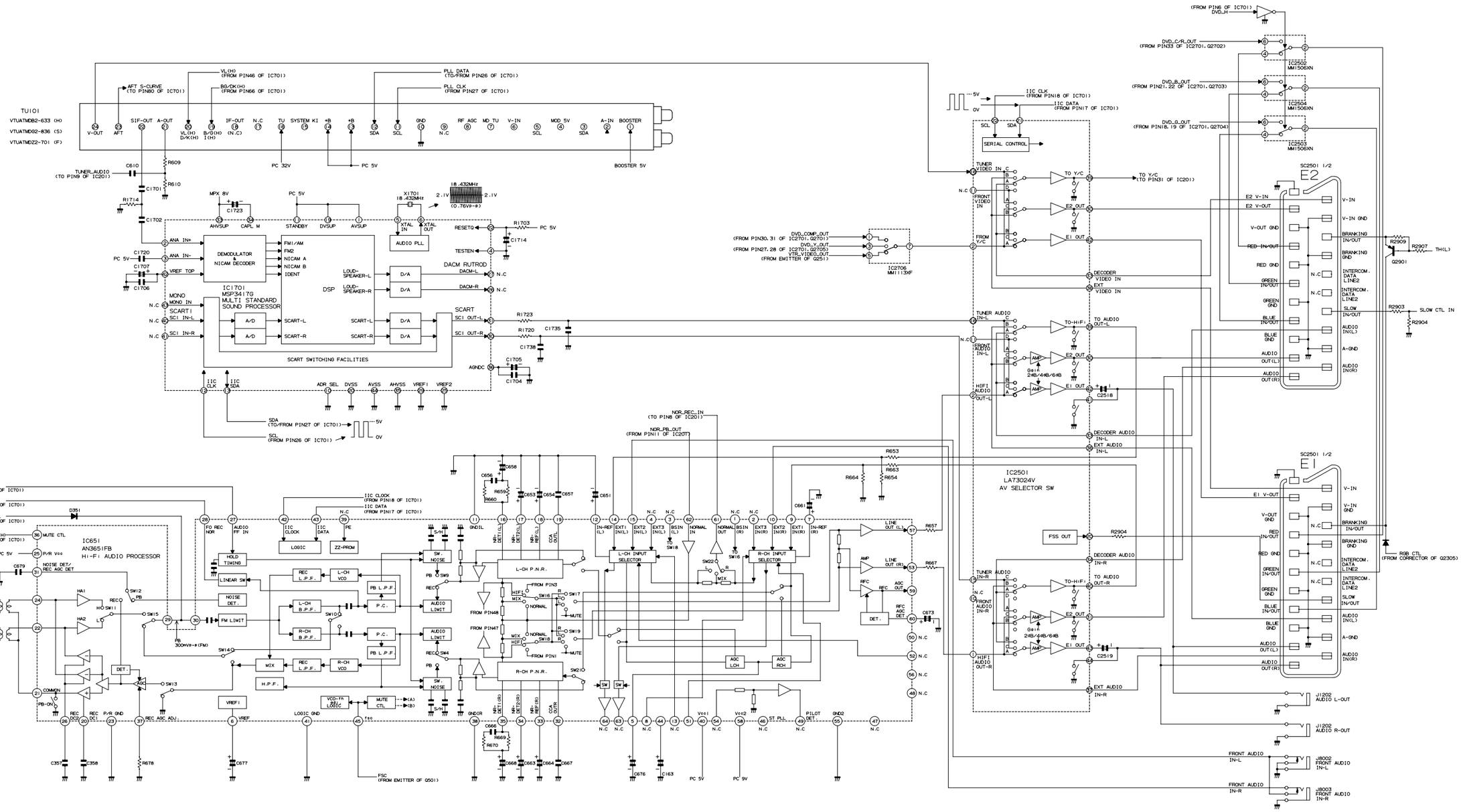
DV-NC65H/S
DV-NC70H

12-3. VCR SERVO BLOCK DIAGRAM



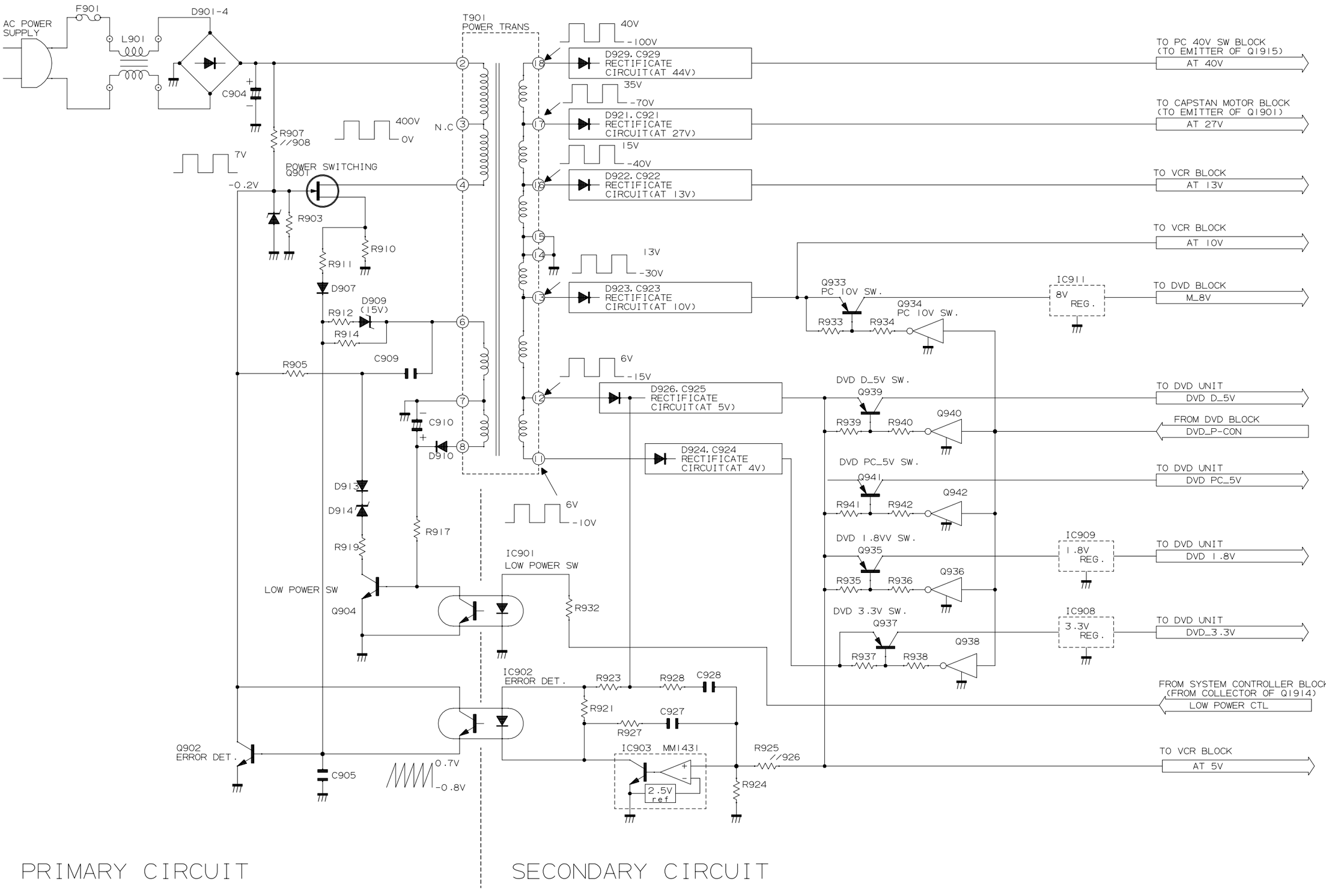
DV-NC65H/S
DV-NC70H

12-4. AUDIO BLOCK DIAGRAM



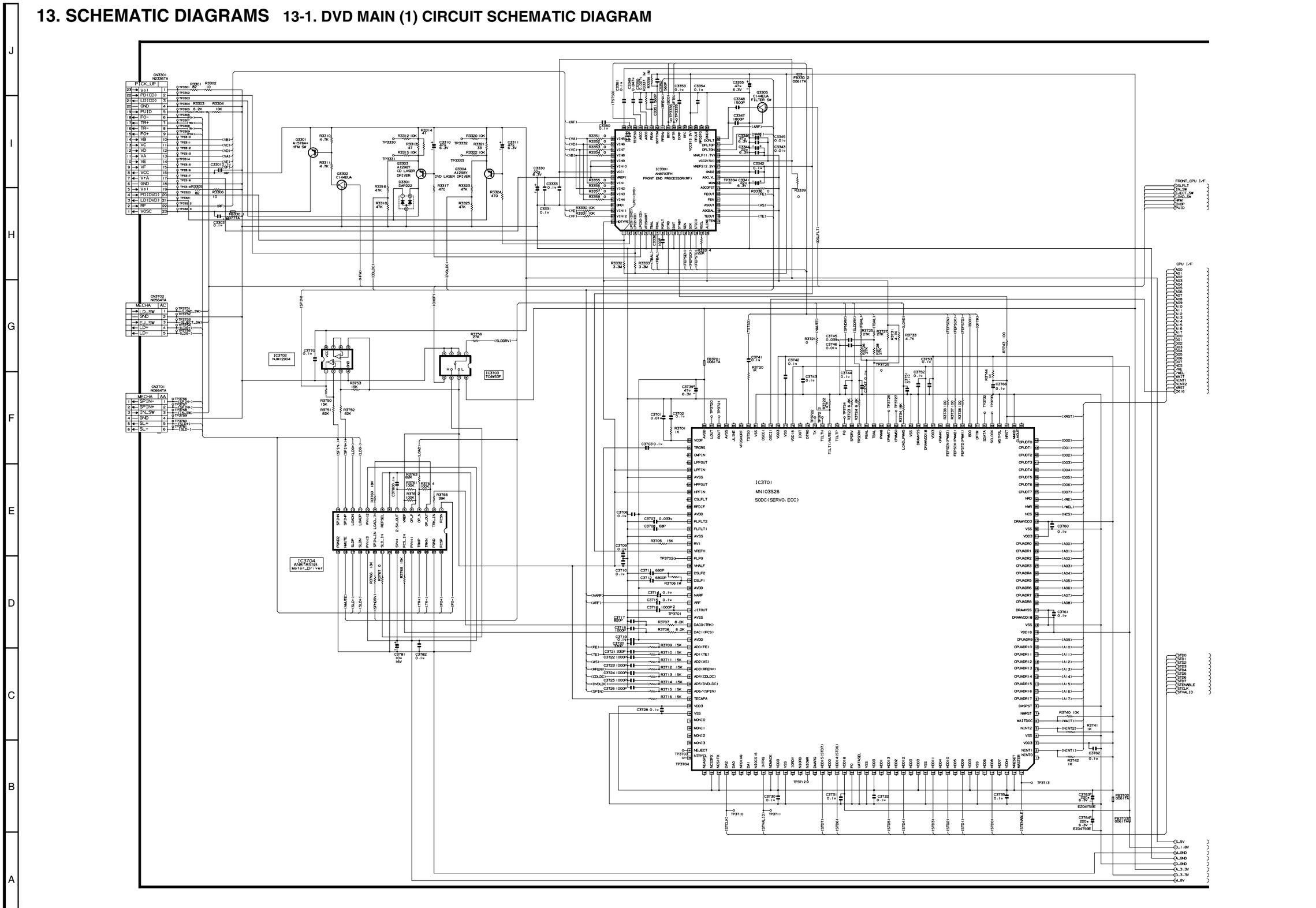
DV-NC65H/S
DV-NC70H

12-5. POWER BLOCK DIAGRAM



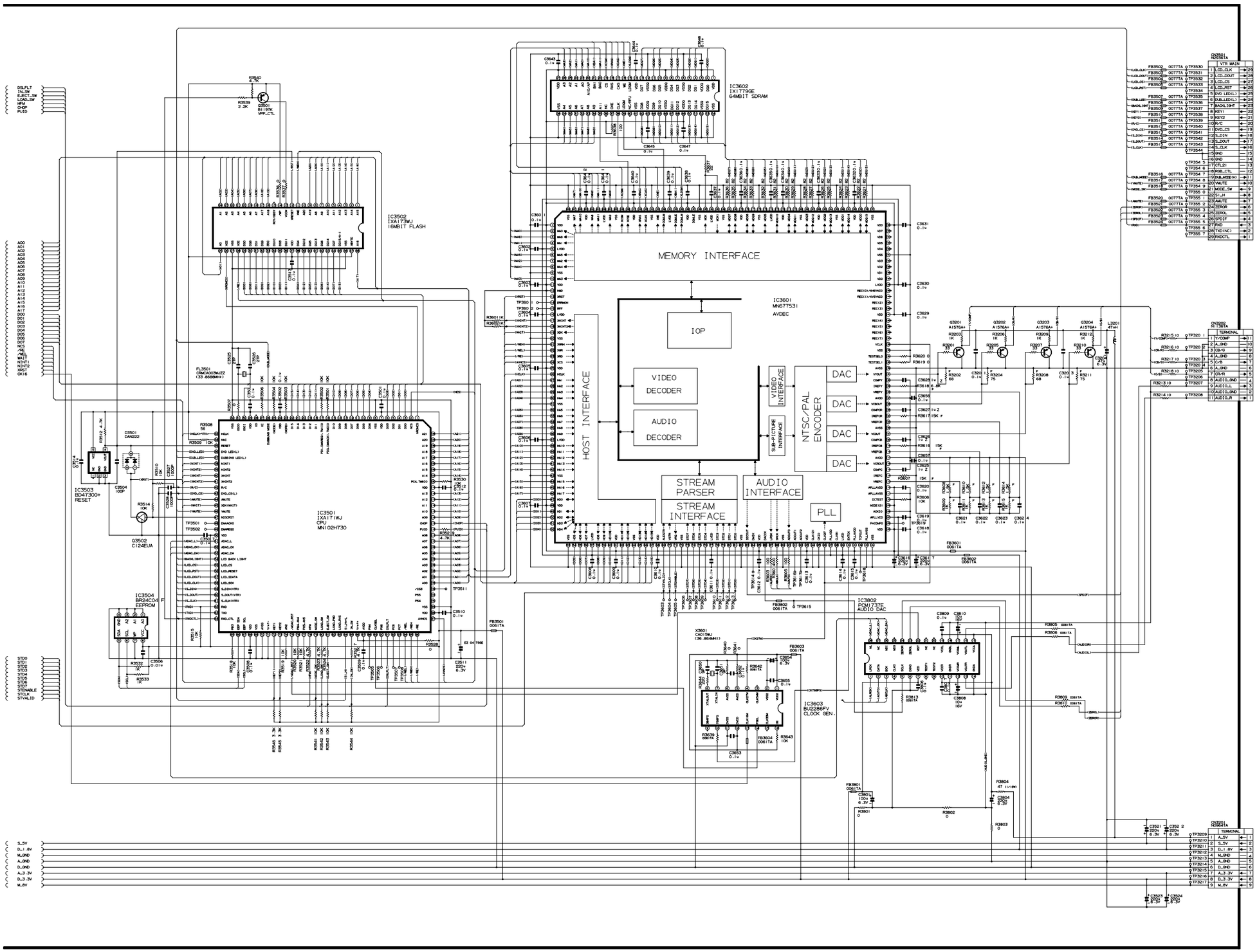
DV-NC65H/S
DV-NC70H

13. SCHEMATIC DIAGRAMS 13-1. DVD MAIN (1) CIRCUIT SCHEMATIC DIAGRAM



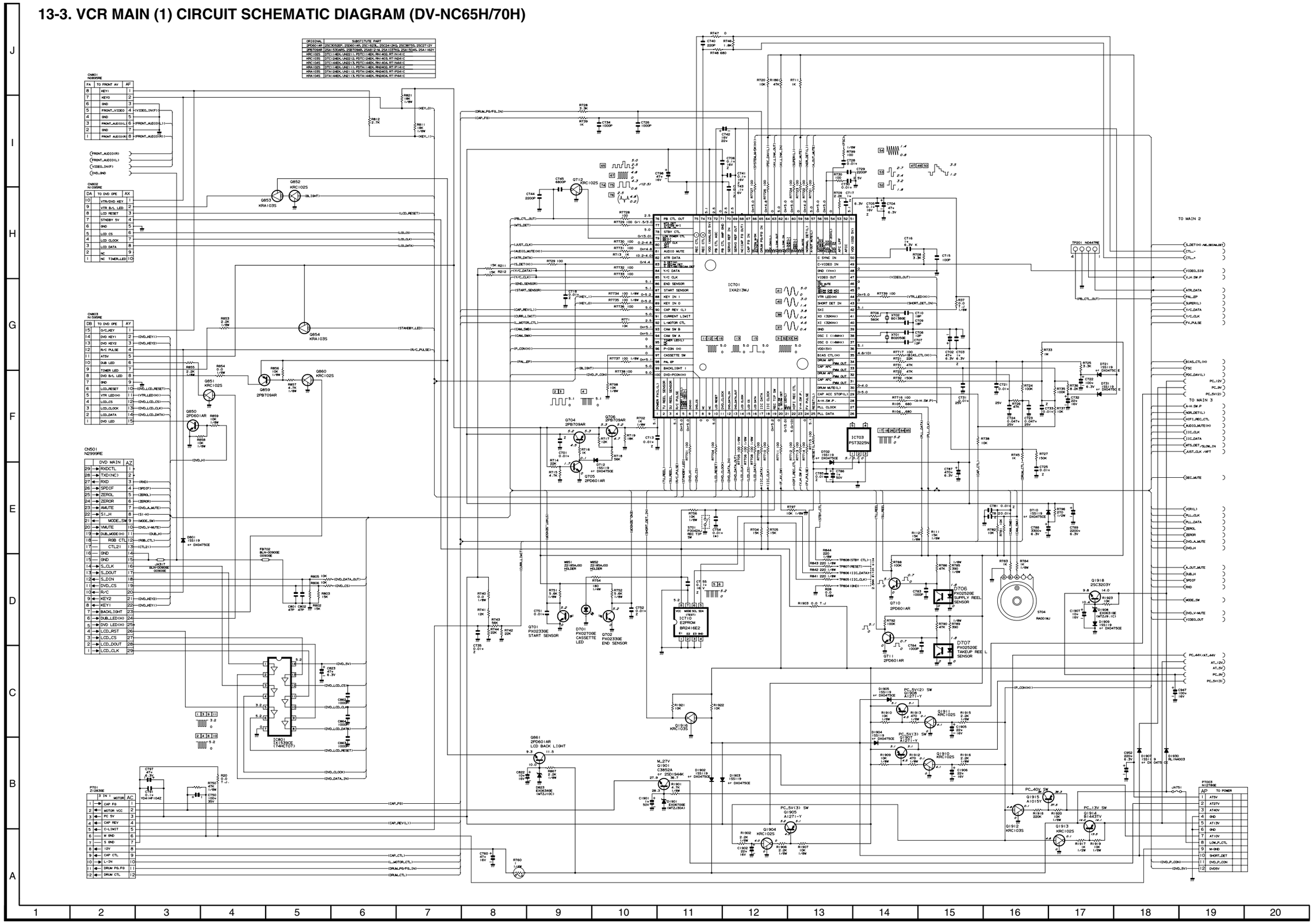
DV-NC65H/S
DV-NC70H

13-2. DVD MAIN (2) CIRCUIT SCHEMATIC DIAGRAM



DV-NC65H/S
DV-NC70H

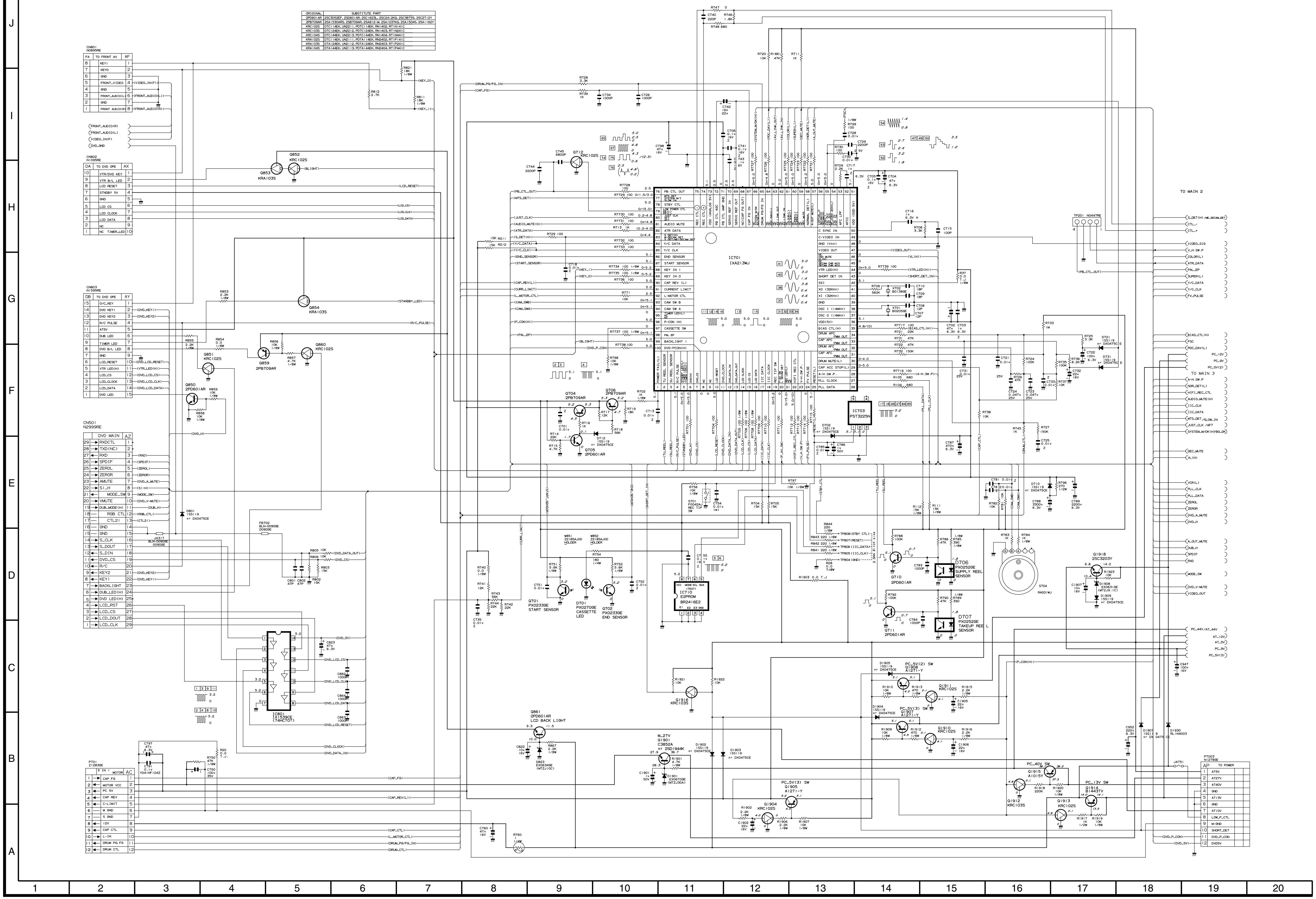
13-3. VCR MAIN (1) CIRCUIT SCHEMATIC DIAGRAM (DV-NC65H/70H)



DV-NC65H/S
DV-NC70H

13-4. VCR MAIN (1) CIRCUIT SCHEMATIC DIAGRAM (DV-NC65S)

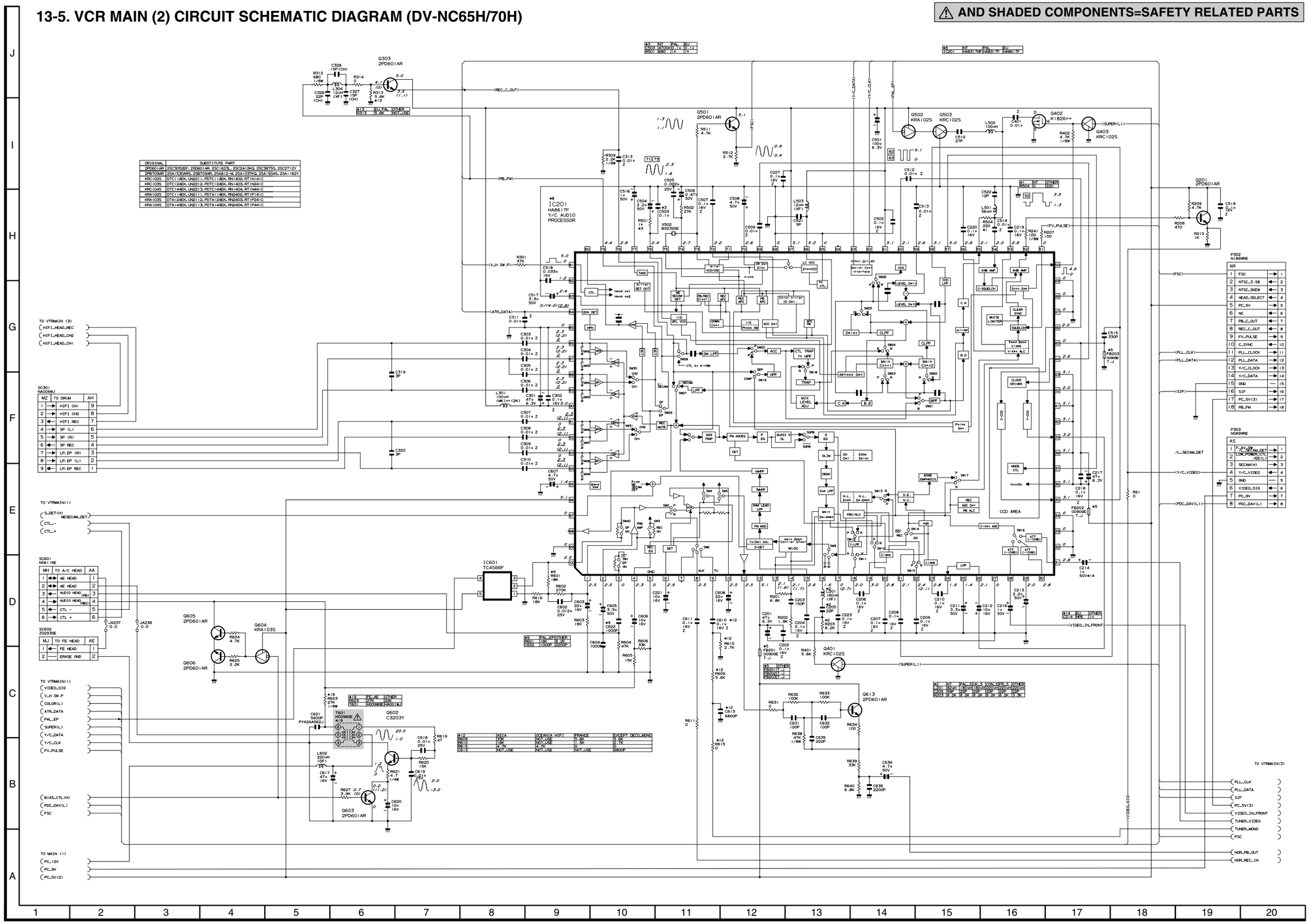
ORIGINAL	SUBSTITUTE PART
2PD601AR	2SC3052EF, 2SD601AR, 2SC1623L, 2SC2412KQ, 2SC3875S, 2SC2712Y
2PB709AR	2SA1530ARS, 2SB709AR, 2SA812-M, 2SA1037KQ, 2SA1504S, 2SA1162Y
KRC102S	DTC114EK, UN2211, PDTC114EK, RN1402, RTIN141C
KRC103S	DTC124EK, UN2212, PDTC124EK, RN1403, RTIN241C
KRC104S	DTC144EK, UN2213, PDTC144EK, RN1404, RTIN441C
KRA102S	DTC114EK, UN2111, PDTA114EK, RN2402, RTIP141C
KRA103S	DTA124EK, UN2112, PDTA124EK, RN2403, RTIP241C
KRA104S	DTA144EK, UN2113, PDTA144EK, RN2404, RTIP441C



DV-NC65H/S
DV-NC70H

13-5. VCR MAIN (2) CIRCUIT SCHEMATIC DIAGRAM (DV-NC65H/70H)

⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



DV-NC65H/S
DV-NC70H

13-6. VCR MAIN (2) CIRCUIT SCHEMATIC DIAGRAM (DV-NC65S)

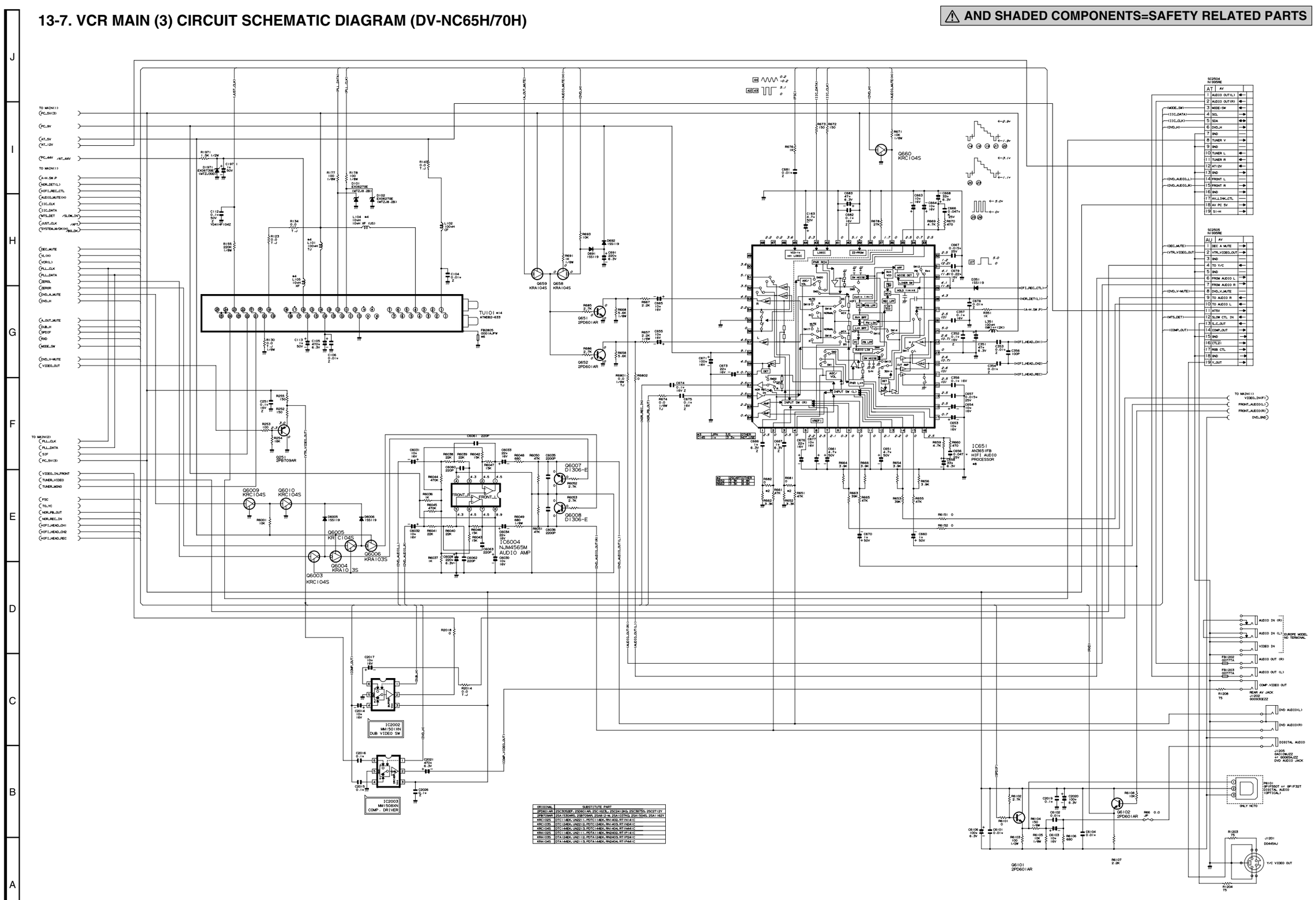
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS

ORIGINAL	SUBSTITUTE PART
2PD601AR	2SC3052EF, 2SD601AR, 2SC1623L, 2SC2412KQ, 2SC3875S, 2SC2712Y
2PB709AR	2SA1530ARS, 2SB709AR, 2SA812-M, 2SA1037KQ, 2SA1045, 2SA1162Y
KRC102S	DTC114EK, UN2211, PDTC114EK, RN1402, RT1N141C
KRC103S	DTC124EK, UN2212, PDTC124EK, RN1403, RT1N241C
KRC104S	DTC144EK, UN2213, PDTC144EK, RN1404, RT1N441C
KRA102S	DTC114EK, UN2111, PDTA114EK, RN2402, RT1P141C
KRA103S	DTA124EK, UN2112, PDTA124EK, RN2403, RT1P241C
KRA104S	DTA144EK, UN2113, PDTA144EK, RN2404, RT1P441C

DV-NC65H/S
DV-NC70H

13-7. VCR MAIN (3) CIRCUIT SCHEMATIC DIAGRAM (DV-NC65H/70H)

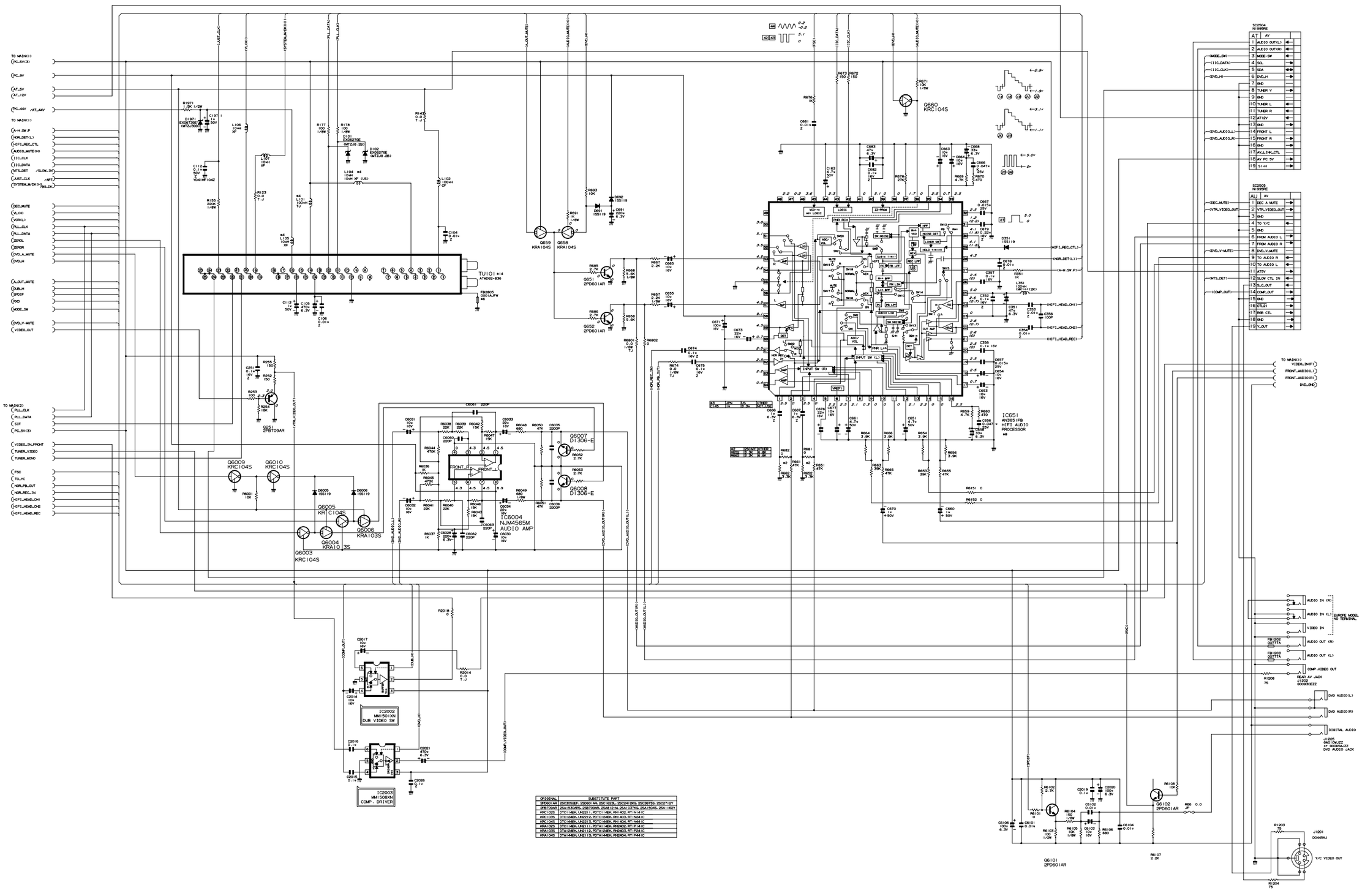
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



ORIGINAL	SUBSTITUTE PART
2PD601AR	2SC3052EF, 2SD601AR, 2SC1623L, 2SC2412KQ, 2SC3875S, 2SC2712Y
2PB709AR	2SA1530ARS, 2SB709ARS, 2SA812-M, 2SA1037KQ, 2SA1504S, 2SA1162Y
KRC102S	DTC114EK, UN2211, PDTC114EK, RN1403, RT1N141C
KRC103S	DTC124EK, UN2213, PDTC124EK, RN1405, RT1N241C
KRC104S	DTC144EK, UN2215, PDTC144EK, RN1404, RT1N441C
KRA102S	DTC114EK, UN2211, PDTA114EK, RN2403, RT1P141C
KRA103S	DTA124EK, UN2213, PDTA124EK, RN2405, RT1P241C
KRA104S	DTA144EK, UN2215, PDTA144EK, RN2404, RT1P441C

DV-NC65H/S
DV-NC70H

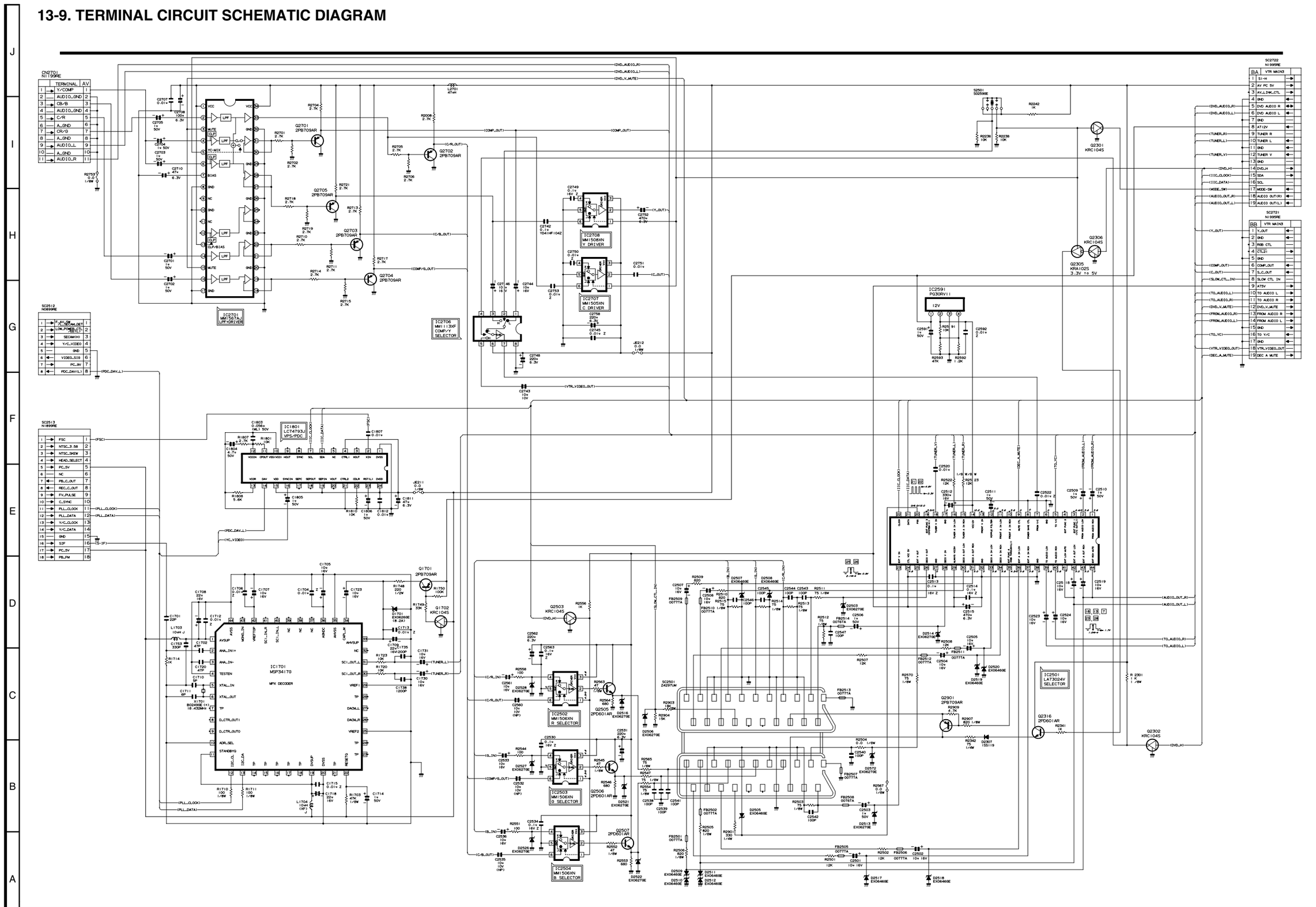
13-8. VCR MAIN (3) CIRCUIT SCHEMATIC DIAGRAM (DV-NC65S)



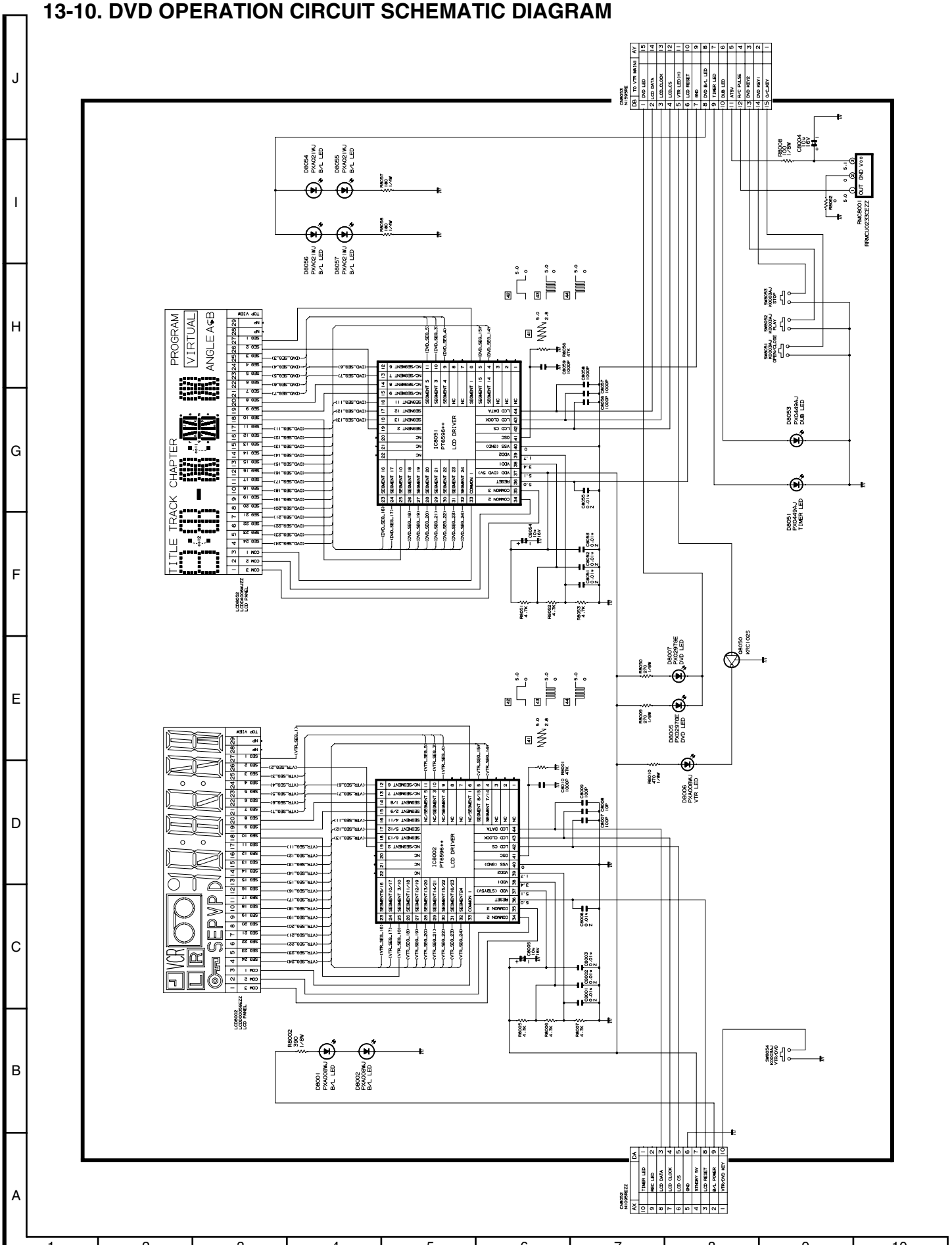
ORIGINAL	SUBSTITUTE PART
2PD601AR	2SC3052EF, 2SD601AR, 2SC1623L, 2SC2412KQ, 2SC3875S, 2SC3712Y
2PB709AR	2SA1530ARS, 2SB709AR, 2SA812-M, 2SA1037KQ, 2SA1504S, 2SA1162Y
KRC102S	DTC114EK, UN5211, RDTC114EK, RN1403, RT1N141C
KRC103S	DTC124EK, UN5212, RDTC124EK, RN1404, RT1N241C
KRC104S	DTC144EK, UN5213, RDTC144EK, RN1404, RT1N441C
KRA102S	DTC114EK, UN5211, RDTA114EK, RN2403, RT1P141C
KRA103S	DTA124EK, UN5212, RDTA124EK, RN2403, RT1P241C
KRA104S	DTA144EK, UN5213, RDTA144EK, RN2404, RT1P441C

DV-NC65H/S
DV-NC70H

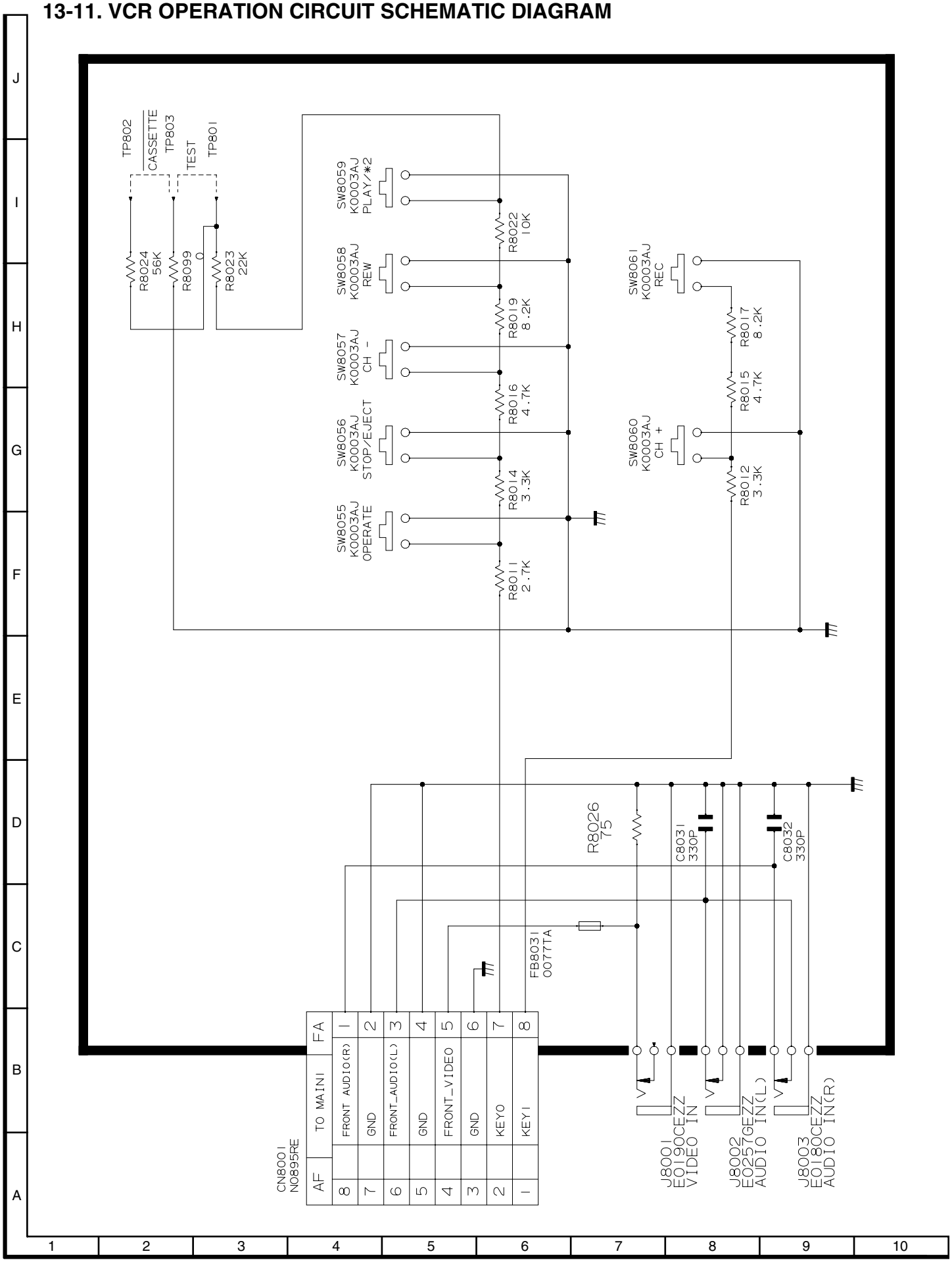
13-9. TERMINAL CIRCUIT SCHEMATIC DIAGRAM



13-10. DVD OPERATION CIRCUIT SCHEMATIC DIAGRAM



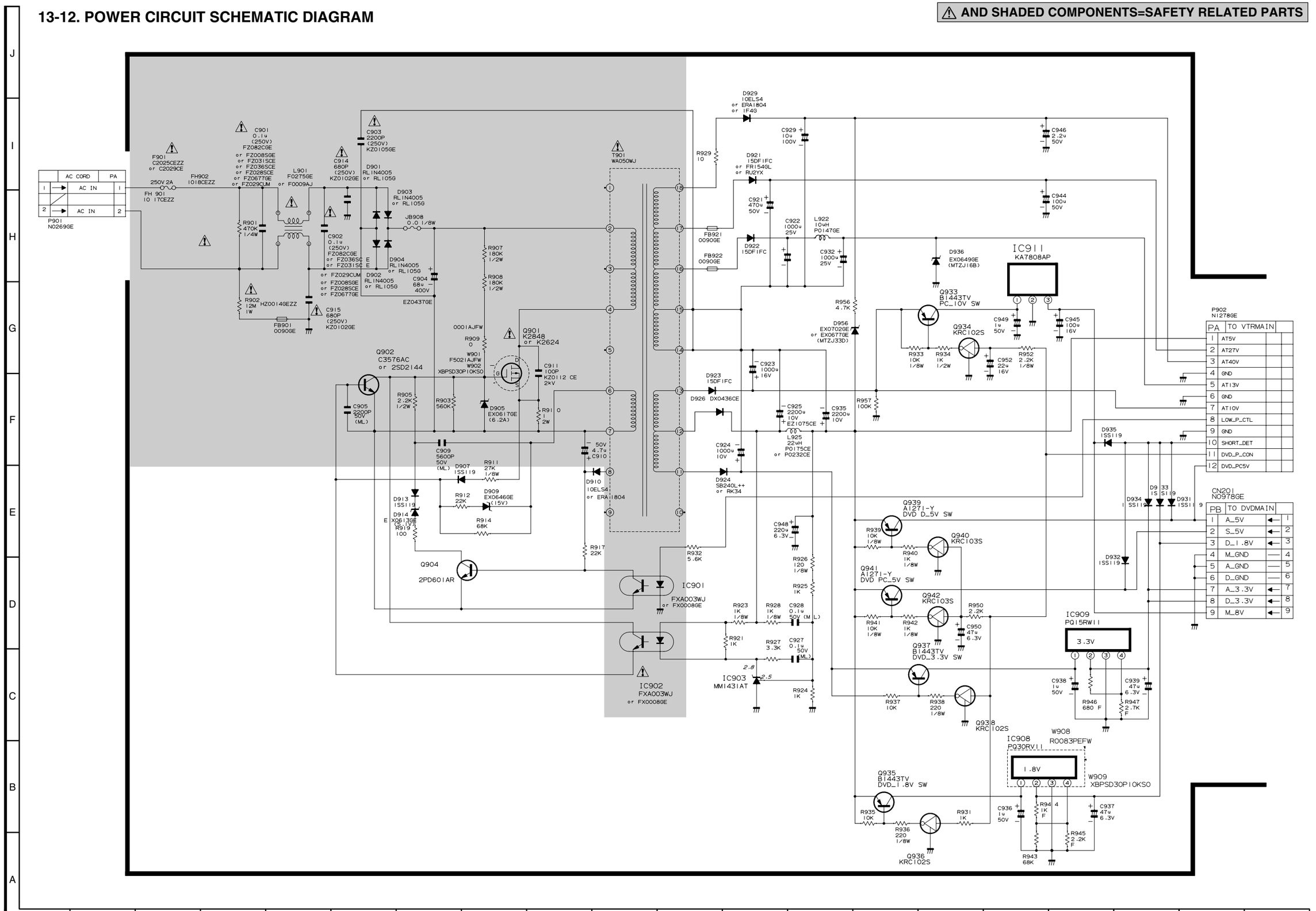
13-11. VCR OPERATION CIRCUIT SCHEMATIC DIAGRAM



DV-NC65H/S
DV-NC70H

13-12. POWER CIRCUIT SCHEMATIC DIAGRAM

⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS

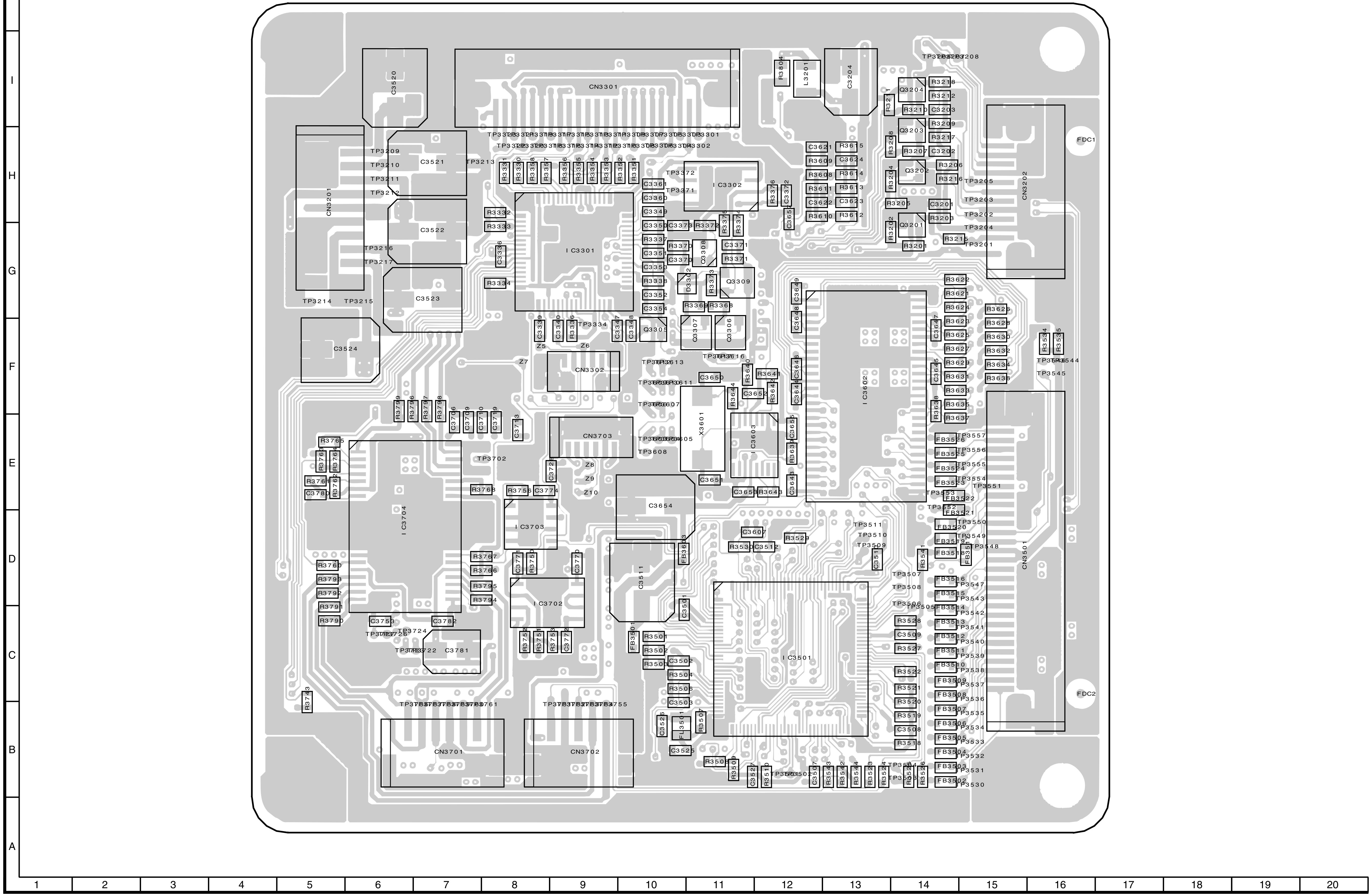


DV-NC65H/S
DV-NC70H

14. PRINTED WIRING BOARD ASSEMBLIES

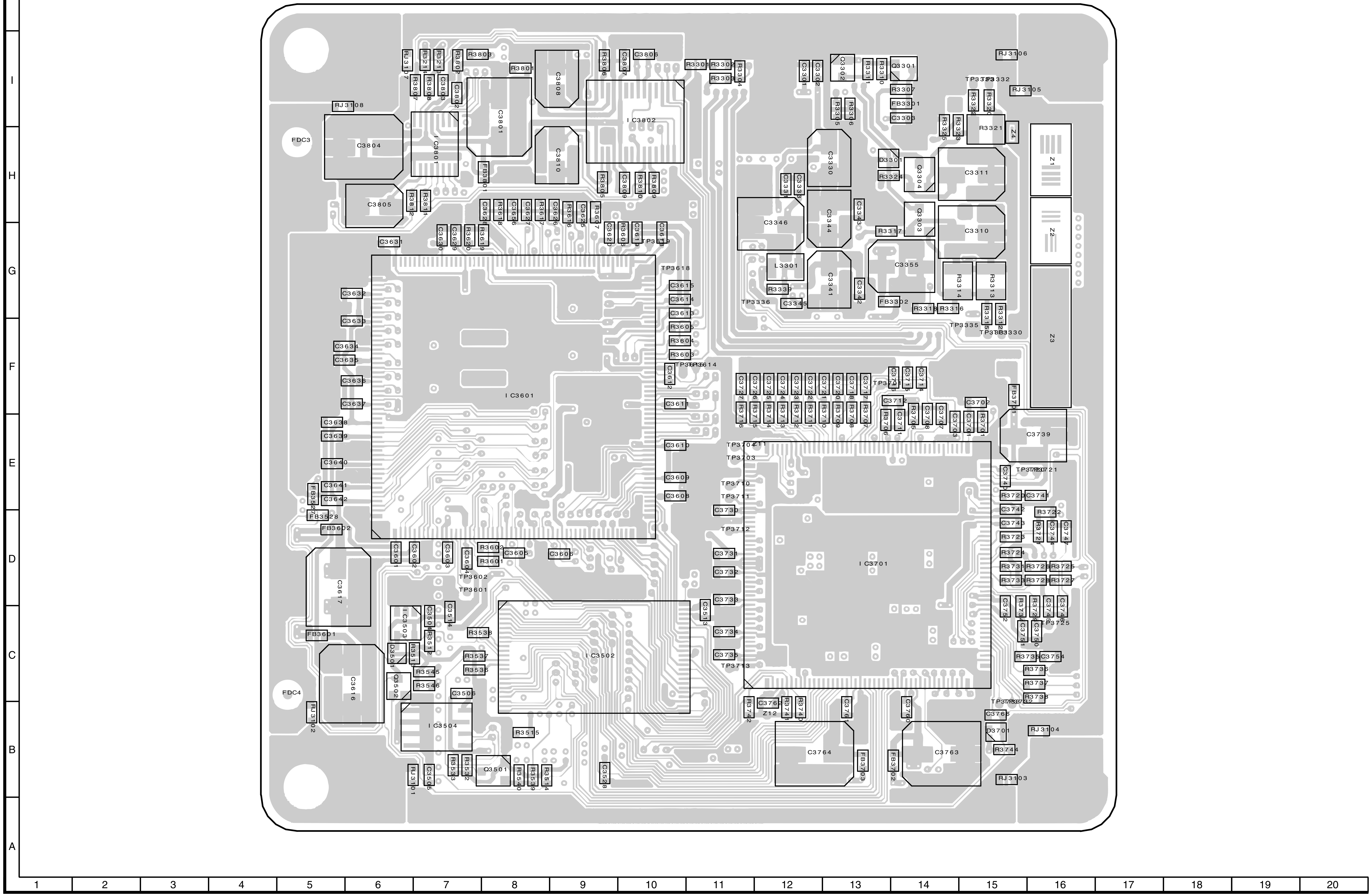
DVD MAIN PWB

SIDE A



DV-NC65H/S
DV-NC70H

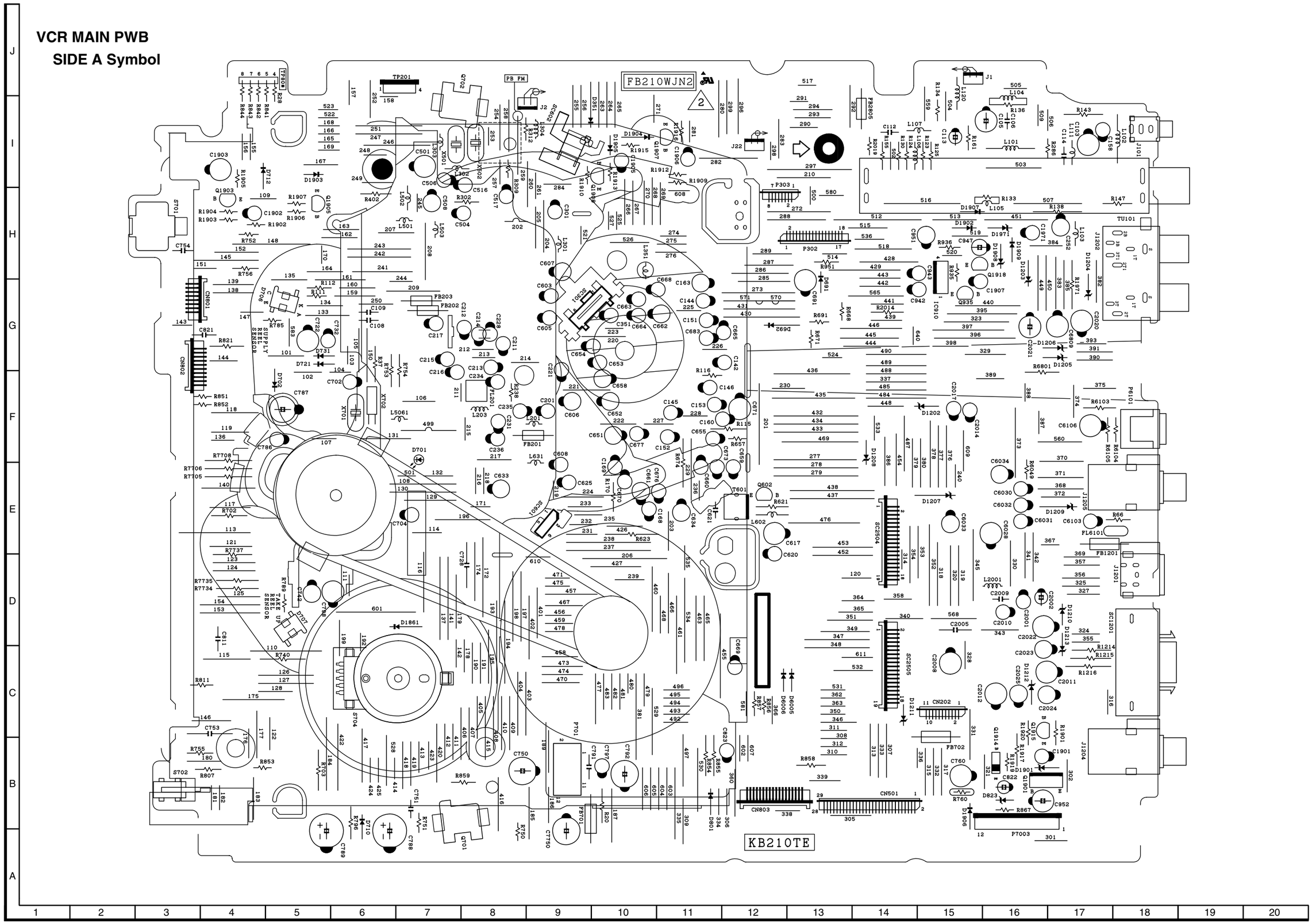
DVD MAIN PWB
SIDE B



DV-NC65H/S
DV-NC70H

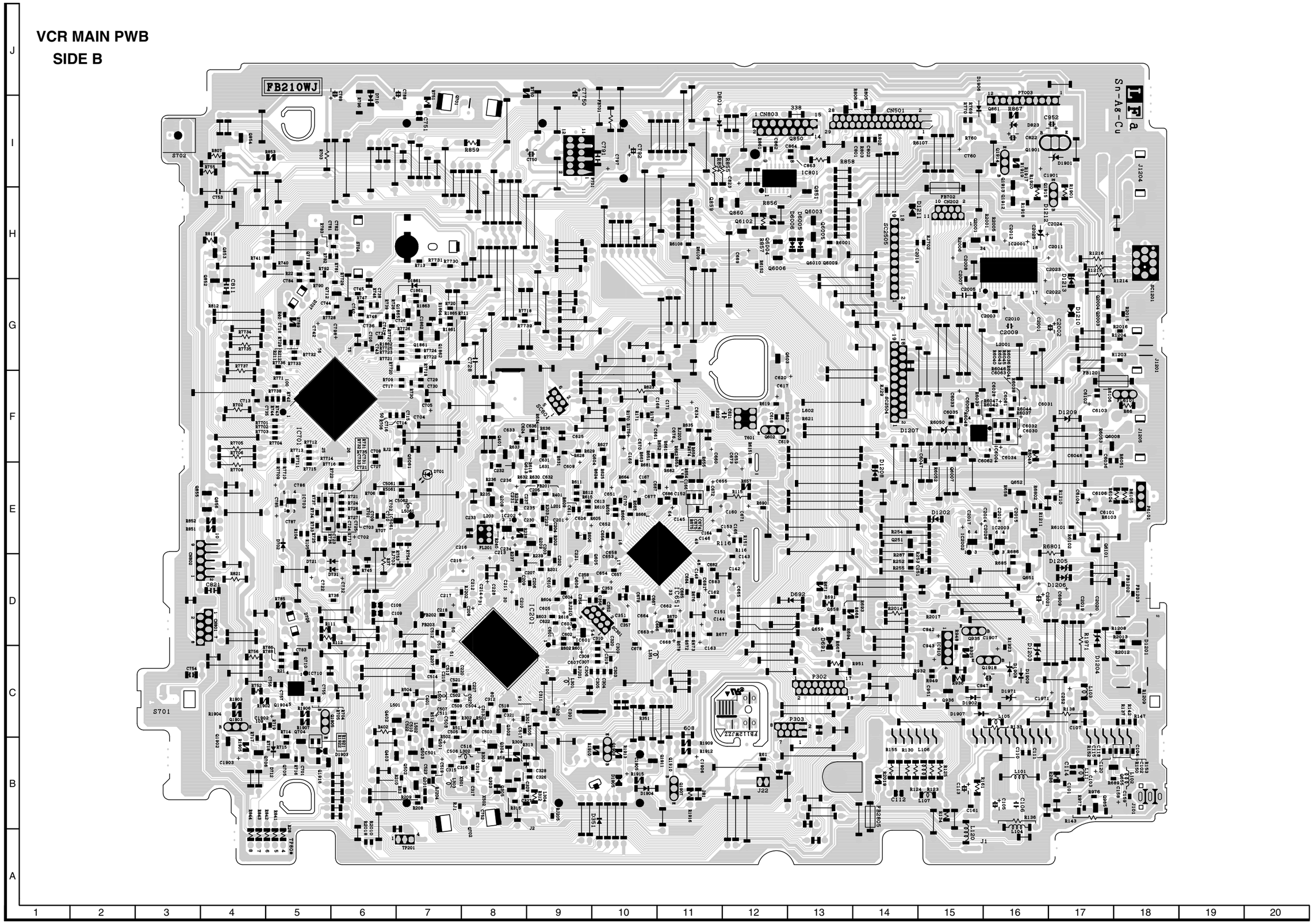
VCR MAIN PWB

SIDE A Symbol

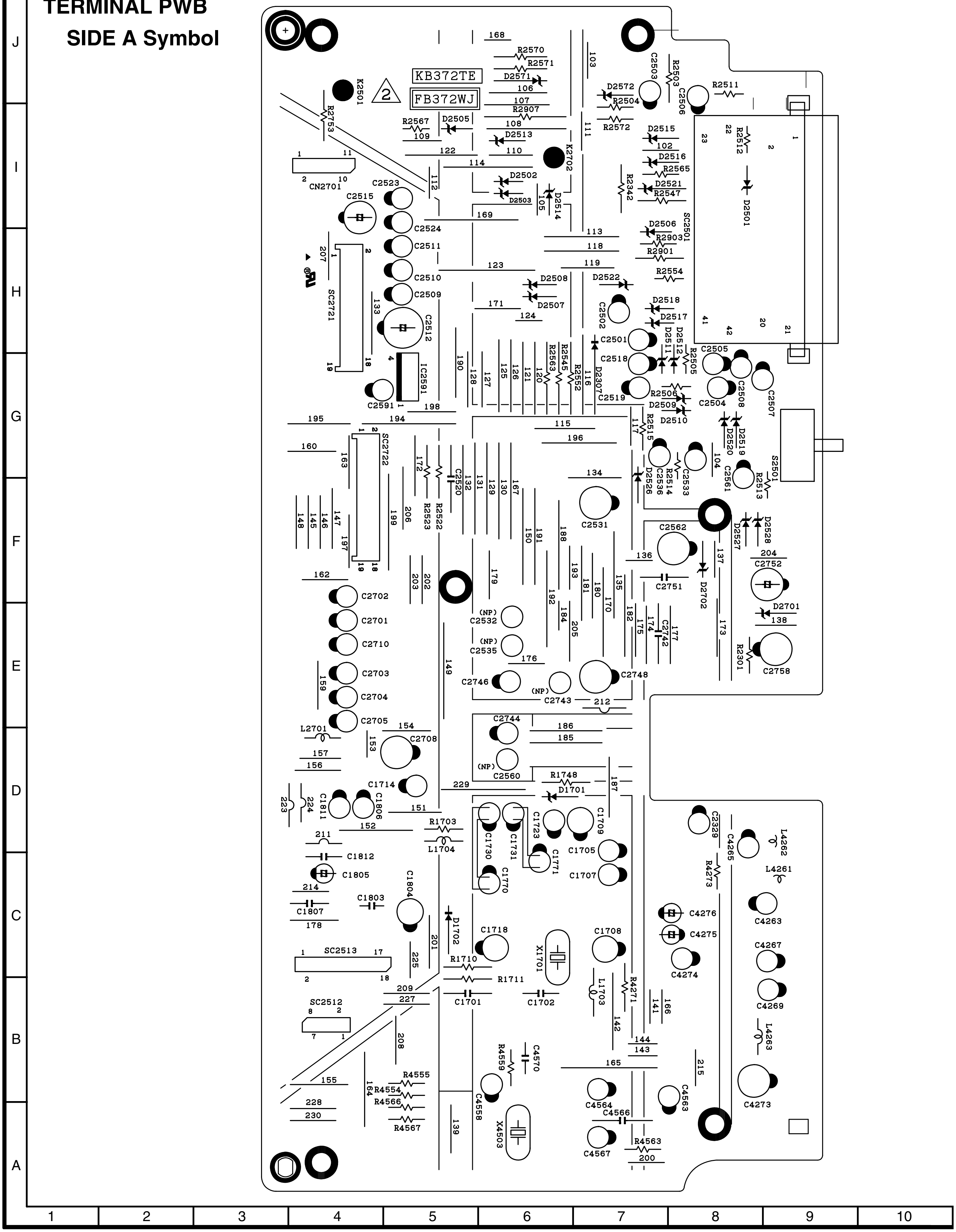


DV-NC65H/S
DV-NC70H

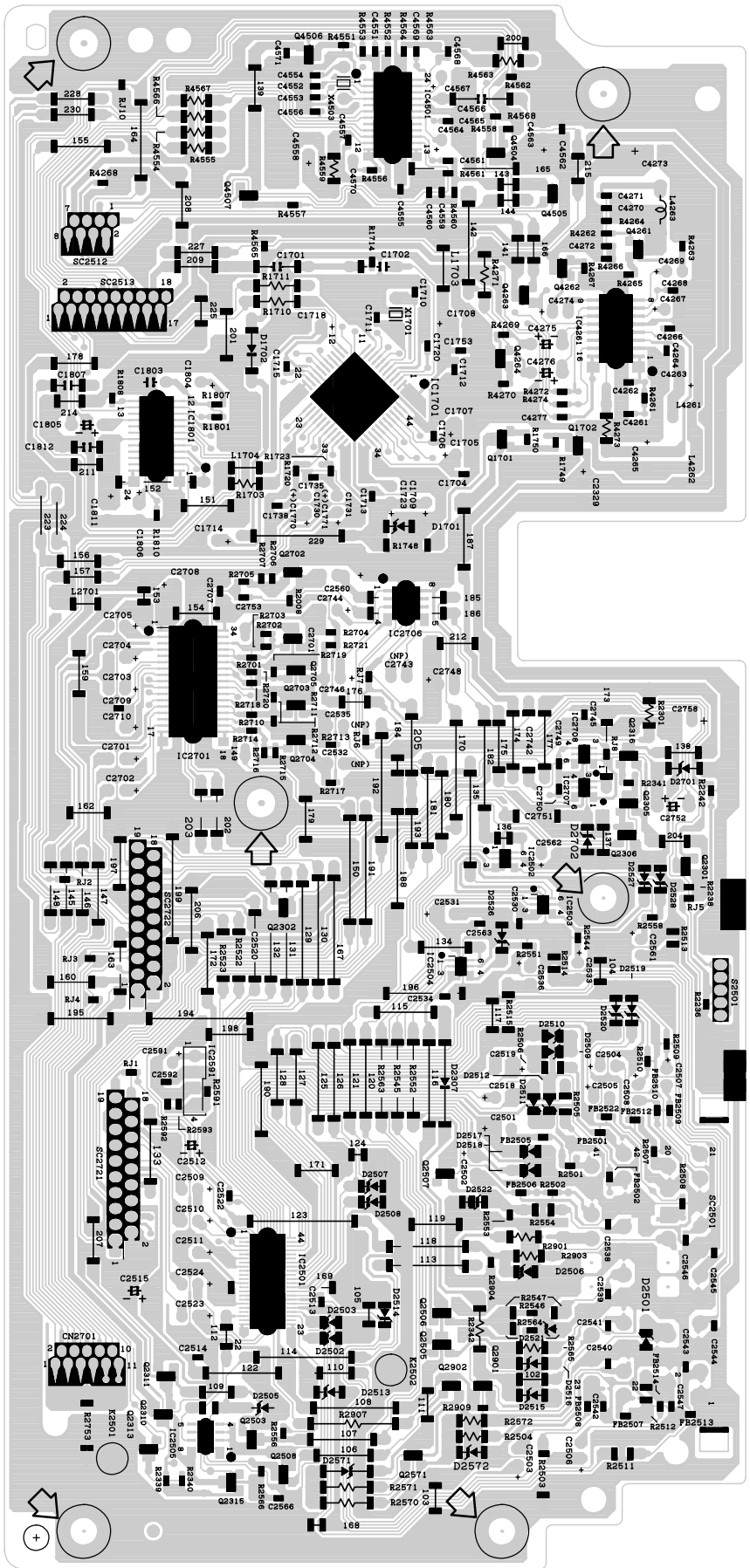
VCR MAIN PWB
SIDE B



TERMINAL PWB
SIDE A Symbol

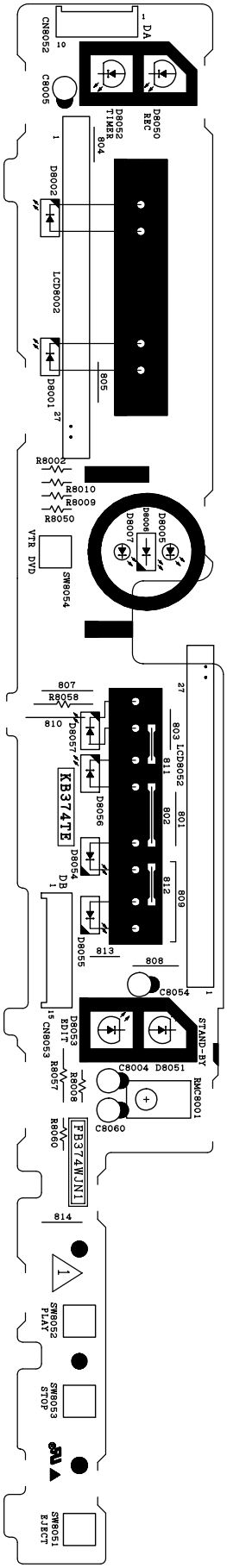


TERMINAL PWB
SIDE B

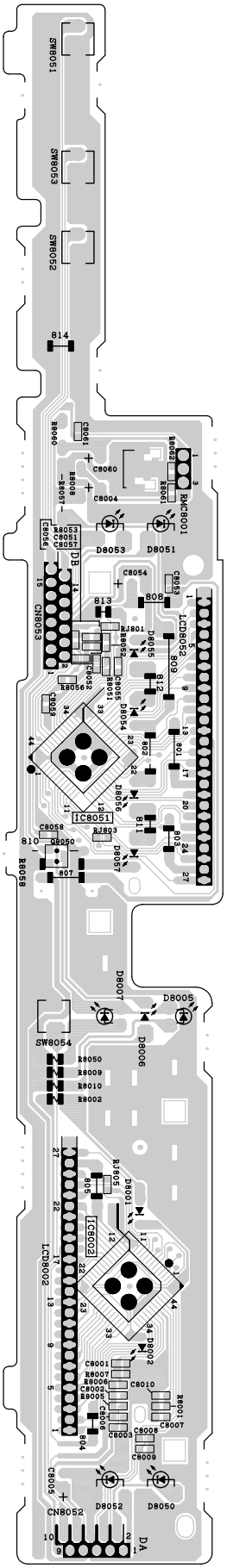


DVD OPERATION PWB

SIDE A Symbol

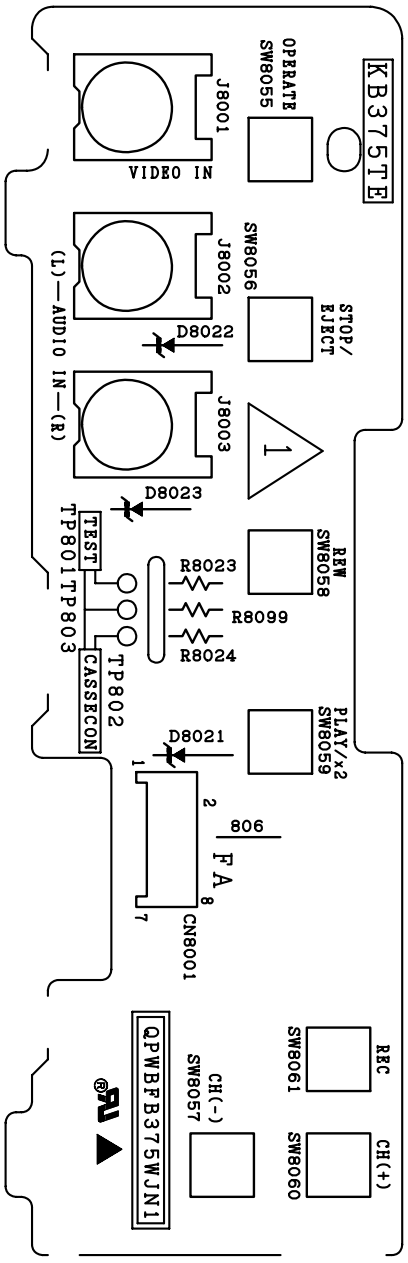


SIDE B

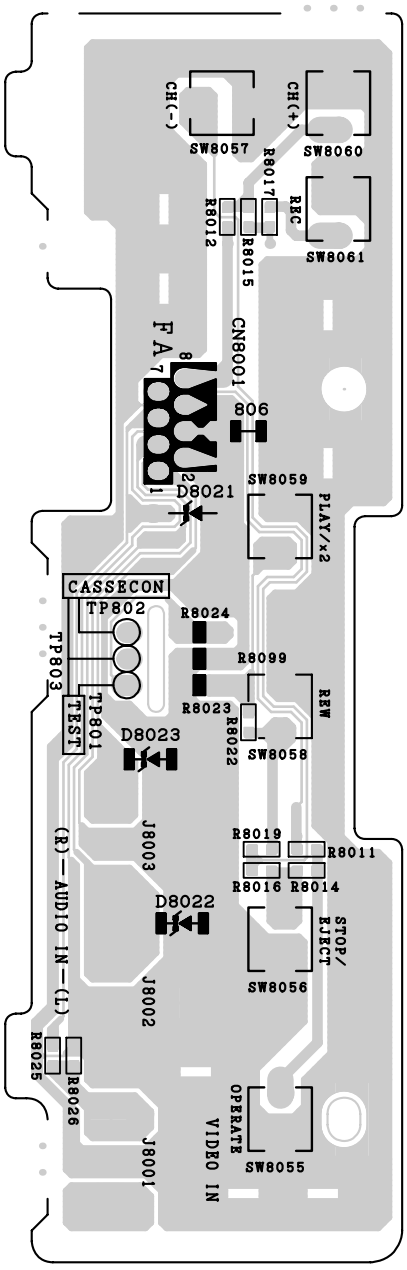


VCR OPERATION PWB

SIDE A Symbol



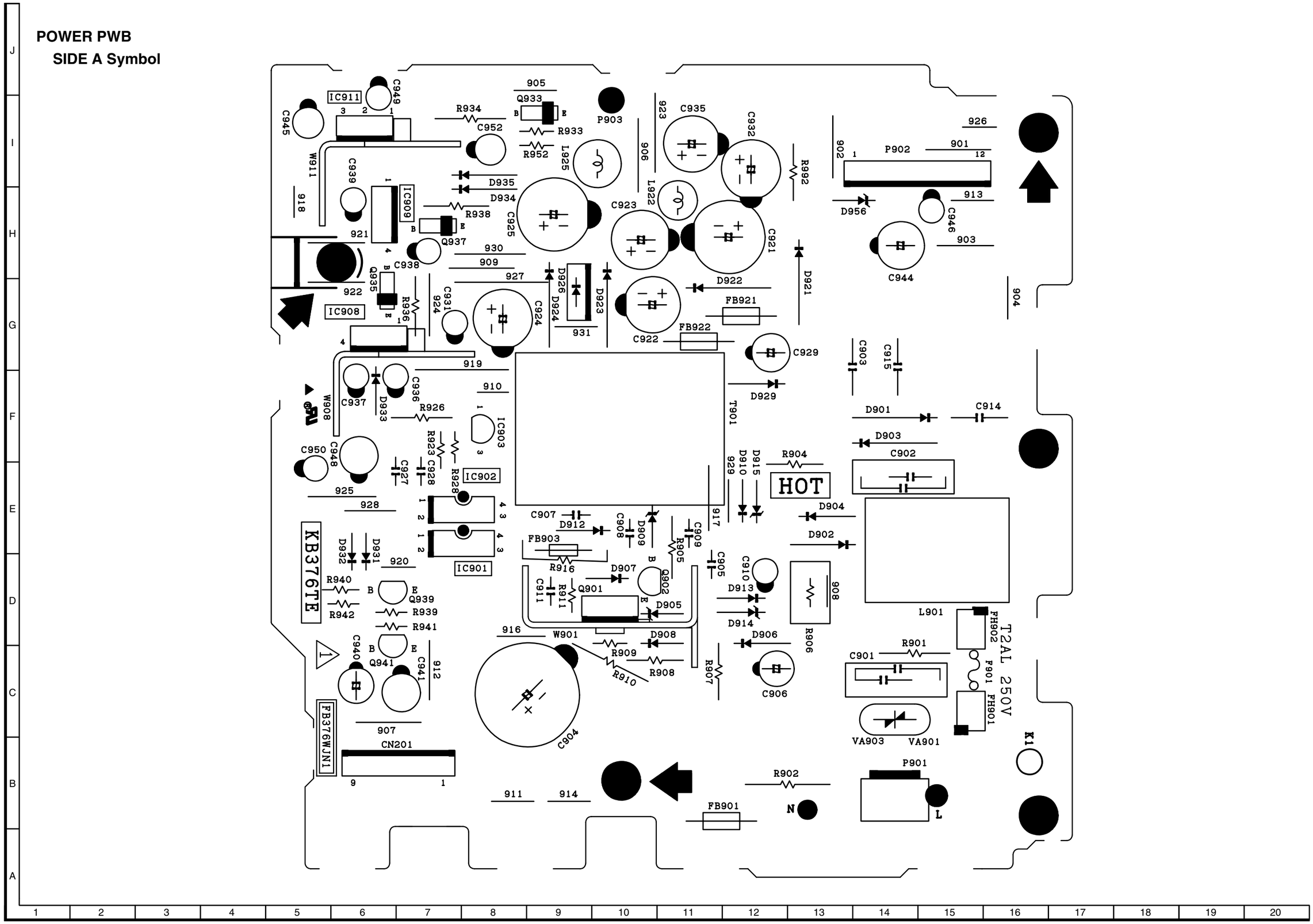
SIDE B



DV-NC65H/S
DV-NC70H

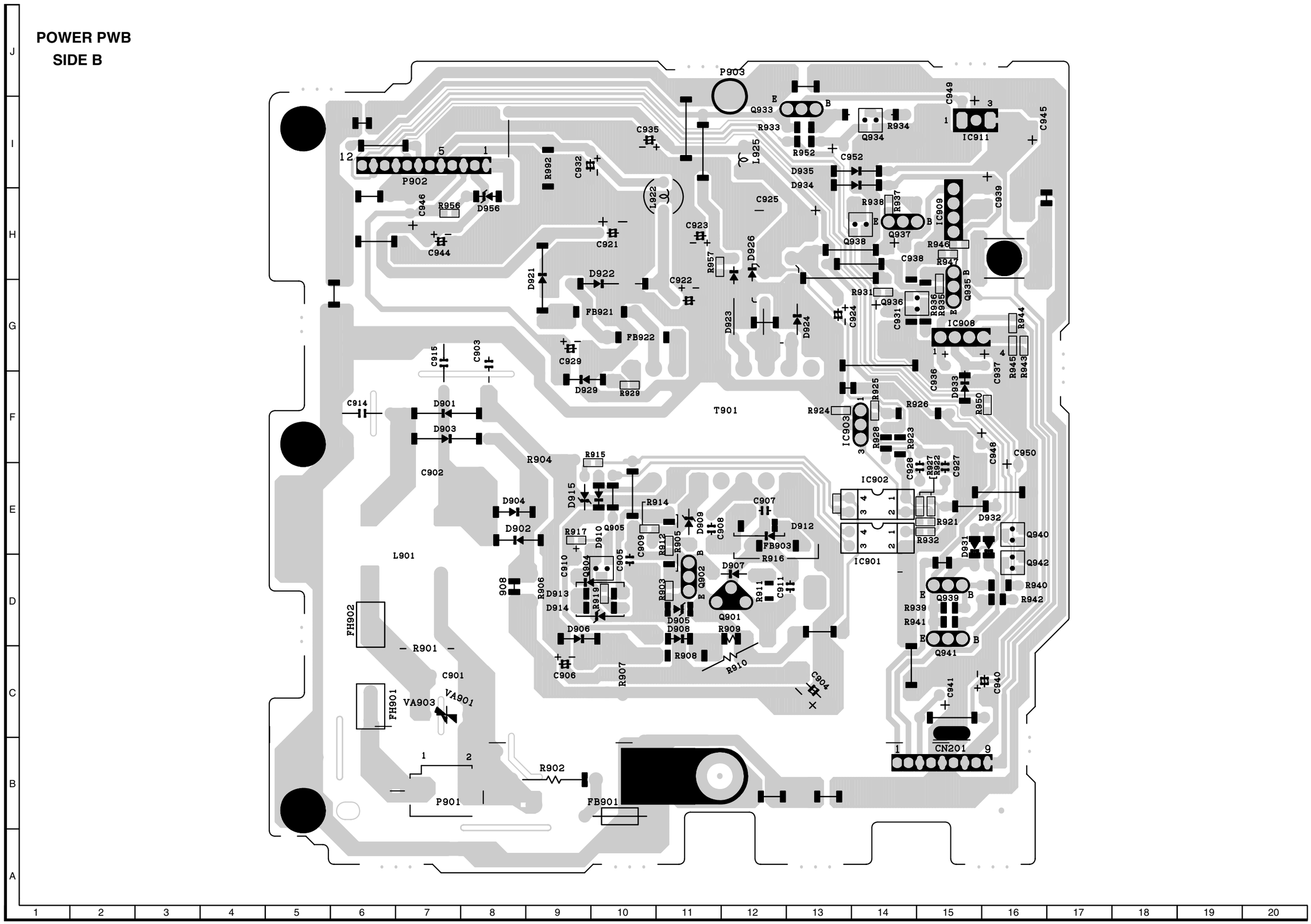
POWER PWB

SIDE A Symbol



DV-NC65H/S
DV-NC70H

POWER PWB
SIDE B



- M E M O -

15. REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

" HOW TO ORDER REPLACEMENT PARTS "

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER **2. REF. NO.**
3. PART NO. **4. DESCRIPTION**
5. PRICE CODE

⚠ MARK: SAFETY RELATED PARTS

PWB ASSEMBLY IS NOT REPLACEMENT ITEM

★MARK : SPARE PARTS-DELIVERY SECTION
"V" for Malaysia, "U" for SUKM

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLIES
(NOT REPLACEMENT ITEM)

	DUNTKB209TE6H	–	DVD Main PWB Unit	—
	DUNTKB210TEV4	–	VCR Main PWB Unit(NC70H)	—
	DUNTKB210TEV5	–	VCR Main PWB Unit(NC65H)	—
	DUNTKB210TEV7	–	VCR Main PWB Unit(NC65S)	—
	DUNTKB372TEV1	–	Terminal PWB Unit	—
	DUNTKB374TEV1	–	DVD Operation PWB Unit	—
	DUNTKB375TEV1	–	VCR Operation PWB Unit	—
	DUNTKB376TEV1	–	Power PWB Unit	—
	DUNTKB233TEV1	–	Sled Motor PWB Unit	—

DUNTKB209TE6H
DVD MAIN PWB UNIT

INTEGRATED CIRCUITS

IC3301	VHiAN8703FH-1Q	V	AN8703FH, Front End Processor	AU
IC3501	RH-iXA171WJZZQ	V	IXA171WJ, CPU	AX
IC3502	RH-iXA173WJZZQ	V	IXA173WJ, 16Mbit Flash	AZ
IC3503	VHiBD4730G+-1Y	V	BD4730G+, Reset	AE
IC3504	VHiBR24C04F-1Y	V	BR24C04F, E^{2}PROM	AG
IC3601	VHiMN677531-1Q	V	MN677531, AV DEC	BL
IC3602	RH-iX1779GEZZQ	V	IX1779GE, 64Mbit SDRAM	BB
IC3603	VHiBU2286FV-1Y	V	BU2286FV, Clock Gen.	AP
IC3701	VHiMN103S26-1Q	V	MN103S26, SODC	BE
IC3702	VHiNJM12904-1Y	V	NJM12904	AE
IC3703	VHiTC4W53F/-1Y	V	TC4W53F	AF
IC3704	VHiAN8785SB-1Y	V	AN8785SB, Motor Driver	AL
IC3802	VHiPCM1737E-1Y	V	PCM1737E, Audio DAC	AN

TRANSISTORS

Q3201	VS2SA1576A+-1Y	V	2SA1576A+	AB
Q3202	VS2SA1576A+-1Y	V	2SA1576A+	AB
Q3203	VS2SA1576A+-1Y	V	2SA1576A+	AB
Q3204	VS2SA1576A+-1Y	V	2SA1576A+	AB
Q3301	VS2SA1576A+-1Y	V	2SA1576A+, HFM SW	AB
Q3302	VSDTC144EUA-1Y	V	DTC144EUA	AB
Q3303	VS2SA1298Y/-1Y	V	2SA1298Y, CD Laser Driver	AB
Q3304	VS2SA1298Y/-1Y	V	2SA1298Y, DVD Laser Driver	AB
Q3305	VSDTC144EUA-1Y	V	DTC144EUA, Filter SW	AB
Q3501	VS2SB1197K/-1Y	V	2SB1197K, VPP_CTL	AC
Q3502	VSDTC124EUA-1Y	V	DTC124EUA	AB

DIODES

D3301	VHDDAP222//-1Y	V	DAP222	AA
D3501	VHDDAN222//-1Y	V	DAN222	AA

PACKAGED CIRCUIT

X3601	RCRSCA015WJZZY	V	Crystal, 36.864MHz	AH

COIL

L3201	VP-NM470K2R0NY	V	Peaking, 47μH	AB

CAPACITORS

C3201	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3203	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3204	VCEAPF0JW476MY	V	47	6.3V	Electrolytic	AB
C3301	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3303	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3310	VCEAPF0JW476MY	V	47	6.3V	Electrolytic	AB
C3311	VCEAPF0JW476MY	V	47	6.3V	Electrolytic	AB
C3330	VCEAPF0JW226MY	V	22	6.3V	Electrolytic	AB
C3331	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3333	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3336	VCCCCY1HH101JY	V	100p	50V	Ceramic	AA
C3341	VCEAPF0JW226MY	V	22	6.3V	Electrolytic	AB
C3342	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3343	VCKYCY1HB103KY	V	0.01	50V	Ceramic	AA
C3344	VCEAPF0JW226MY	V	22	6.3V	Electrolytic	AB
C3345	VCKYCY1HB103KY	V	0.01	50V	Ceramic	AA
C3346	VCEAPF0JW476MY	V	47	6.3V	Electrolytic	AB
C3347	VCKYCY1HB182KY	V	1800p	50V	Ceramic	AA
C3348	VCKYCY1HB152KY	V	1500p	50V	Ceramic	AA
C3349	VCKYCY1CB473KY	V	0.047	16V	Ceramic	AA
C3350	VCKYCY1CB273KY	V	0.027	16V	Ceramic	AB
C3351	VCKYCY1HB561KY	V	560p	50V	Ceramic	AA
C3352	VCKYCY1HB561KY	V	560p	50V	Ceramic	AA
C3353	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3354	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3355	VCEAPF0JW476MY	V	47	6.3V	Electrolytic	AB
C3360	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3361	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3501	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3502	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3503	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3504	VCCCCY1HH101JY	V	100p	50V	Ceramic	AA
C3506	VCKYCY1HB103KY	V	0.01	50V	Ceramic	AA
C3507	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3508	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3509	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3510	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3511	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3512	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3513	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3514	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3521	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3522	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3523	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3524	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3525	VCCCCY1HH270JY	V	27p	50V	Ceramic	AA
C3526	VCCCCY1HH270JY	V	27p	50V	Ceramic	AA
C3527	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3528	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3601	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3602	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3603	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3604	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3605	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3606	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3607	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3608	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3609	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3610	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3611	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3612	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB

Ref. No.	Part No.	★	Description			Code
DUNTKB209TE6H DVD MAIN PWB UNIT(Continued)						
C3613	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3614	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3615	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3616	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3617	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3618	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3619	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3620	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3621	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3622	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3623	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3624	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3625	VCKYCY0JF105ZY	V	1	6.3V	Ceramic	AB
C3626	VCKYCY0JF105ZY	V	1	6.3V	Ceramic	AB
C3627	VCKYCY0JF105ZY	V	1	6.3V	Ceramic	AB
C3628	VCKYCY0JF105ZY	V	1	6.3V	Ceramic	AB
C3629	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3630	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3631	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3632	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3633	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3634	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3635	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3636	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3637	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3638	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3639	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3640	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3641	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3642	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3643	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3644	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3645	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3647	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3648	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3650	VCCCCY1HH9R0DY	V	9p	50V	Ceramic	AA
C3651	VCCCCY1HH9R0DY	V	9p	50V	Ceramic	AA
C3652	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3653	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3654	VCEAPF0JW107MY	V	100	6.3V	Electrolytic	AC
C3655	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3656	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3657	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3701	VCKYCY1HB103KY	V	0.01	50V	Ceramic	AA
C3702	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3703	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3706	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3707	VCKYCY1CB333KY	V	0.033	16V	Ceramic	AA
C3708	VCCCCY1HH680JY	V	68p	50V	Ceramic	AA
C3709	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3710	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3711	VCKYCY1HB681KY	V	680p	50V	Ceramic	AA
C3712	VCKYCY1HB682KY	V	6800p	50V	Ceramic	AA
C3714	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3715	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3716	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3717	VCKYCY1HB821KY	V	820p	50V	Ceramic	AA
C3718	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3719	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3720	VCKYCY1HB331KY	V	330p	50V	Ceramic	AA
C3721	VCKYCY1HB331KY	V	330p	50V	Ceramic	AA
C3722	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3723	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3724	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3725	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3726	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C3728	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3730	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3731	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3732	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3735	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3739	VCEAPF0JW476MY	V	47	6.3V	Electrolytic	AB
C3741	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3742	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3743	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3744	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3745	VCKYCY1CB393KY	V	0.039	16V	Ceramic	AA
C3746	VCKYCY1HB103KY	V	0.01	50V	Ceramic	AA
C3747	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3751	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3752	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3753	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3760	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3761	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3762	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3763	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3764	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3766	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3770	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3780	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3781	VCEAPF1CW106MY	V	10	16V	Electrolytic	AB
C3782	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3801	VCEAPF0JW107MY	V	100	6.3V	Electrolytic	AC
C3804	RC-EZ0475GEZZY	V	220	6.3V	Electrolytic	AD
C3806	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3807	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3808	VCEAPF1CW106MY	V	10	16V	Electrolytic	AB
C3809	VCKYCY1CB104KY	V	0.1	16V	Ceramic	AB
C3810	VCEAPF1CW106MY	V	10	16V	Electrolytic	AB
FL3501	RCRMCA003WJZZY	V	Ceramic Vibrator			AE

RESISTORS

R3201	VRS-CY1JF330JY	V	33	1/16W	Metal Oxide	AA
R3202	VRS-CY1JF680FY	V	68	1/16W	Metal Oxide	AA
R3203	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R3204	VRS-CY1JF750FY	V	75	1/16W	Metal Oxide	AA
R3205	VRS-CY1JF330JY	V	33	1/16W	Metal Oxide	AA
R3206	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R3207	VRS-CY1JF330JY	V	33	1/16W	Metal Oxide	AA
R3208	VRS-CY1JF680FY	V	68	1/16W	Metal Oxide	AA
R3209	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R3210	VRS-CY1JF330JY	V	33	1/16W	Metal Oxide	AA
R3211	VRS-CY1JF750FY	V	75	1/16W	Metal Oxide	AA
R3212	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R3213	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3214	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3215	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3216	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3217	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3218	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3301	VRS-CY1JF820JY	V	82	1/16W	Metal Oxide	AA
R3302	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3303	VRS-CY1JF822JY	V	8.2k	1/16W	Metal Oxide	AA
R3304	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R3305	VRS-CY1JF820JY	V	82	1/16W	Metal Oxide	AA
R3306	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R3310	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide	AA
R3311	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide	AA
R3312	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R3313	VRS-TW2ED470JY	V	47	1/4W	Metal Oxide	AA
R3314	VRS-TW2ED470JY	V	47	1/4W	Metal Oxide	AA
R3315	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R3316	VRS-CY1JF473JY	V	47k	1/16W	Metal Oxide	AA
R3317	VRS-CY1JF471JY	V	470	1/16W	Metal Oxide	AA
R3318	VRS-CY1JF473JY	V	47k	1/16W	Metal Oxide	AA
R3320	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R3321	VRS-TW2ED330JY	V	33	1/4W	Metal Oxide	AA
R3322	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R3323	VRS-CY1JF473JY	V	47k	1/16W	Metal Oxide	AA
R3324	VRS-CY1JF471JY	V	470	1/16W	Metal Oxide	AA
R3325	VRS-CY1JF473JY	V	47k	1/16W	Metal Oxide	AA
R3330	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R3331	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R3332	VRS-CY1JF335JY	V	3.3M	1/16W	Metal Oxide	AA
R3333	VRS-CY1JF335JY	V	3.3M	1/16W	Metal Oxide	AA
R3334	VRS-CY1JF223JY	V	22k	1/16W	Metal Oxide	AA
R3336	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
DUNTKB209TE6H DVD MAIN PWB UNIT(Continued)				
R3337	VRS-CY1JF105JY	V	1M 1/16W Metal Oxide	AA
R3338	VRS-CY1JF105JY	V	1M 1/16W Metal Oxide	AA
R3339	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3351	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3352	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3353	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3354	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3355	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3356	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3357	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3358	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3501	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3502	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3503	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3504	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3506	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3507	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3508	VRS-CY1JF560JY	V	56 1/16W Metal Oxide	AA
R3509	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3510	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3512	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3514	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3515	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3518	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3519	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3520	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3521	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3522	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3523	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3524	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3527	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3528	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3529	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3530	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3532	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3533	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3536	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3537	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3539	VRS-CY1JF222JY	V	2.2k 1/16W Metal Oxide	AA
R3540	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3541	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3542	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3543	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3544	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3545	VRS-CY1JF332JY	V	3.3k 1/16W Metal Oxide	AA
R3546	VRS-CY1JF332JY	V	3.3k 1/16W Metal Oxide	AA
R3601	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3602	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3603	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3604	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3605	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3606	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3607	VRS-CY1JF153FY	V	15k 1/16W Metal Oxide	AA
R3608	VRS-CY1JF152FY	V	1.5k 1/16W Metal Oxide	AA
R3609	VRS-CY1JF102FY	V	1k 1/16W Metal Oxide	AA
R3610	VRS-CY1JF152FY	V	1.5k 1/16W Metal Oxide	AA
R3611	VRS-CY1JF102FY	V	1k 1/16W Metal Oxide	AA
R3612	VRS-CY1JF152FY	V	1.5k 1/16W Metal Oxide	AA
R3613	VRS-CY1JF102FY	V	1k 1/16W Metal Oxide	AA
R3614	VRS-CY1JF152FY	V	1.5k 1/16W Metal Oxide	AA
R3615	VRS-CY1JF102FY	V	1k 1/16W Metal Oxide	AA
R3616	VRS-CY1JF153FY	V	15k 1/16W Metal Oxide	AA
R3617	VRS-CY1JF153FY	V	15k 1/16W Metal Oxide	AA
R3618	VRS-CY1JF682FY	V	6.8k 1/16W Metal Oxide	AA
R3619	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3620	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3621	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3622	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3623	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3624	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3625	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3626	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3627	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3628	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3629	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3630	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3631	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3632	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3633	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3634	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3635	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3636	VRS-CY1JF820JY	V	82 1/16W Metal Oxide	AA
R3637	VRS-CY1JF220JY	V	22 1/16W Metal Oxide	AA
R3638	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3640	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3641	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3643	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3644	VRS-CY1JF221JY	V	220 1/16W Metal Oxide	AA
R3701	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3705	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3706	VRS-CY1JF105JY	V	1M 1/16W Metal Oxide	AA
R3707	VRS-CY1JF822JY	V	8.2k 1/16W Metal Oxide	AA
R3708	VRS-CY1JF822JY	V	8.2k 1/16W Metal Oxide	AA
R3709	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3710	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3711	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3712	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3713	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3714	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3715	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3716	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3720	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3721	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3722	VRS-CY1JF473JY	V	47k 1/16W Metal Oxide	AA
R3723	VRS-CY1JF682JY	V	6.8k 1/16W Metal Oxide	AA
R3724	VRS-CY1JF682JY	V	6.8k 1/16W Metal Oxide	AA
R3725	VRS-CY1JF273JY	V	27k 1/16W Metal Oxide	AA
R3726	VRS-CY1JF273JY	V	27k 1/16W Metal Oxide	AA
R3727	VRS-CY1JF273JY	V	27k 1/16W Metal Oxide	AA
R3728	VRS-CY1JF273JY	V	27k 1/16W Metal Oxide	AA
R3731	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3733	VRS-CY1JF472JY	V	4.7k 1/16W Metal Oxide	AA
R3734	VRS-CY1JF183JY	V	18k 1/16W Metal Oxide	AA
R3736	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3737	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3738	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3740	VRS-CY1JF103JY	V	10k 1/16W Metal Oxide	AA
R3741	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3742	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3743	VRS-CY1JF101JY	V	100 1/16W Metal Oxide	AA
R3744	VRS-CY1JF102JY	V	1k 1/16W Metal Oxide	AA
R3750	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3751	VRS-CY1JF823JY	V	82k 1/16W Metal Oxide	AA
R3752	VRS-CY1JF823JY	V	82k 1/16W Metal Oxide	AA
R3753	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3756	VRS-CY1JF273JY	V	27k 1/16W Metal Oxide	AA
R3760	VRS-CY1JF183JY	V	18k 1/16W Metal Oxide	AA
R3761	VRS-CY1JF104JY	V	100k 1/16W Metal Oxide	AA
R3762	VRS-CY1JF104JY	V	100k 1/16W Metal Oxide	AA
R3763	VRS-CY1JF823JY	V	82k 1/16W Metal Oxide	AA
R3764	VRS-CY1JF104JY	V	100k 1/16W Metal Oxide	AA
R3765	VRS-CY1JF393JY	V	39k 1/16W Metal Oxide	AA
R3766	VRS-CY1JF183JY	V	18k 1/16W Metal Oxide	AA
R3767	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3768	VRS-CY1JF153JY	V	15k 1/16W Metal Oxide	AA
R3801	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3802	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3803	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
R3804	VRS-TV1JD470JY	V	47 1/16W Metal Oxide	AA
BALUNES				
FB3301	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3302	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3501	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3502	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3503	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3504	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB

Ref. No.	Part No.	★	Description	Code
DUNTKB209TE6H DVD MAIN PWB UNIT(Continued)				
FB3505	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3507	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3508	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3509	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3510	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3511	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3512	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3513	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3514	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3515	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3516	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3517	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3518	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3520	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3521	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3522	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3523	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3524	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB
FB3601	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3602	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3603	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3604	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3701	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3702	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3703	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3801	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
FB3802	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
R3639	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
R3642	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
R3805	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
R3806	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
R3809	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
R3810	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
R3813	RBLN-0061TAZZY	V	Balun, BLN-0061TA	AD
MISCELLANEOUS PARTS				
CN3201	QPLGN0964TAZZY	V	Plug, 9Pin	AF
CN3202	QSOCN1136TAZZY	V	Socket, 11Pin	AE
CN3301	QSOCN2336TAZZY	V	Socket, 23Pin	AF
CN3501	QSOCN2936TAZZY	V	Socket, 29Pin	AF
CN3701	QPLGN0664TAZZY	V	Plug, 6Pin	AD
CN3702	QPLGN0564TAZZY	V	Plug, 5Pin	AC
DUNTKB210TEV4(NC70H) DUNTKB210TEV5(NC65H) DUNTKB210TEV7(NC65S) VCR MAIN PWB UNIT				
TUNER				
TU101	VTUATMDB2-633	V	VHF Tuner(NC65H/NC70H)	BD
TU101	VTUATMDG2-836	V	VHF Tuner(NC65S)	BE
INTEGRATED CIRCUITS				
IC201	VHiHA8617F/-1	V	HA8617F, Y/C Audio Processor	AX
IC601	VHiTC4S66F/-1Y	V	TC4S66F	AD
IC651	VHiAN3651FB-1	V	AN3651FB, Hifi Audio Processor	AU
IC701	RH-iXA213WJZZQ	V	IXA213WJ	
IC703	VHiPST3225N1EY	V	PST3225N	AD
IC710	VHiBR2416E2-1Y	V	BR2416E2, E²PROM	AK
IC801	RH-iX1539CEZZY	V	IX1539CE	AE
IC2002	VHiMM1501XN-1Y	V	MM1501XN, Dub Video SW	AE
IC2003	VHiMM1508XN-1Y	V	MM1508XN, Comp. Driver	AE
IC6004	VHiNJM4565M-1Y	V	NJM4565M, Audio Amp	AE
TRANSISTORS				
Q201	VS2PD601AR/-1Y	V	2PD601AR	AB
Q251	VS2PB709AR/-1Y	V	2PB709AR	AB
Q303	VS2PD601AR/-1Y	V	2PD601AR	AB
Q401	VSKRC102S//-1Y	V	KRC102S	AA
Q402	VS2SK1826++-1Y	V	2SK1826++	AC
Q403	VSKRC102S//-1Y	V	KRC102S	AA
Q501	VS2PD601AR/-1Y	V	2PD601AR	AB
Q502	VSKRA102S//-1Y	V	KRA102S	AA
Q503	VSKRC102S//-1Y	V	KRC102S	AA
Q602	VS2SC3203Y/-1+	V	2SC3203Y	AC
Q603	VS2PD601AR/-1Y	V	2PD601AR	AB
Q604	VSKRA103S//-1Y	V	KRA103S	AA
Q605	VS2PD601AR/-1Y	V	2PD601AR	AB
Q606	VS2PD601AR/-1Y	V	2PD601AR	AB
Q613	VS2PD601AR/-1Y	V	2PD601AR	AB
Q651	VS2PD601AR/-1Y	V	2PD601AR	AB
Q652	VS2PD601AR/-1Y	V	2PD601AR	AB
Q658	VSKRA104S//-1Y	V	KRA104S	AA
Q659	VSKRA104S//-1Y	V	KRA104S	AA
Q660	VSKRC104S//-1Y	V	KRC104S	AA
Q704	VS2PB709AR/-1Y	V	2PB709AR	AB
Q705	VS2PD601AR/-1Y	V	2PD601AR	AB
Q706	VS2PB709AR/-1Y	V	2PB709AR	AB
Q710	VS2PD601AR/-1Y	V	2PD601AR	AB
Q711	VS2PD601AR/-1Y	V	2PD601AR	AB
Q712	VSKRC102S//-1Y	V	KRC102S	AA
Q850	VS2PD601AR/-1Y	V	2PD601AR	AB
Q851	VSKRC102S//-1Y	V	KRC102S	AA
Q852	VSKRC102S//-1Y	V	KRC102S	AA
Q853	VSKRA103S//-1Y	V	KRA103S	AA
Q854	VSKRA103S//-1Y	V	KRA103S	AA
Q859	VS2PB709AR/-1Y	V	2PB709AR	AB
Q860	VSKRC102S//-1Y	V	KRC102S	AA
Q861	VS2PD601AR/-1Y	V	2PD601AR, LCD Back Light	AB
Q1901	VS2SC3852A/-1	V	2SC3852A, M_27V	AH
Q1904	VSKRC102S//-1Y	V	KRC102S	AA
Q1905	VS2SA1271-Y-1+	V	2SA1271-Y, PC_5V(3) SW	AC
Q1907	VS2SA1271-Y-1+	V	2SA1271-Y, PC_5V(3) SW	AC
Q1908	VS2SA1271-Y-1+	V	2SA1271-Y, PC_5V(2) SW	AC
Q1910	VSKRC102S//-1Y	V	KRC102S	AA
Q1911	VSKRC102S//-1Y	V	KRC102S	AA
Q1912	VSKRC103S//-1Y	V	KRC103S	AA
Q1913	VSKRC102S//-1Y	V	KRC102S	AA
Q1914	VS2SB1443TV1E+	V	2SB1443TV, PC_13V SW	AE
Q1915	VS2SA1015Y/1E+	V	2SA1015Y, PC_40V SW	AB
Q1916	VSKRC103S//-1Y	V	KRC103S	AA
Q1918	VS2SC3203Y/-1+	V	2SC3203Y	AC
Q6003	VSKRC104S//-1Y	V	KRC104S	AA
Q6004	VSKRA103S//-1Y	V	KRA103S	AA
Q6005	VSKRC104S//-1Y	V	KRC104S	AA
Q6006	VSKRA103S//-1Y	V	KRA103S	AA
Q6007	VS2SD1306-E-1Y	V	2SD1306-E	AC
Q6008	VS2SD1306-E-1Y	V	2SD1306-E	AC
Q6009	VSKRC104S//-1Y	V	KRC104S	AA
Q6010	VSKRC104S//-1Y	V	KRC104S	AA
Q6101	VS2PD601AR/-1Y	V	2PD601AR	AB
Q6102	VS2PD601AR/-1Y	V	2PD601AR	AB
DIODES AND LED'S				
D101	RH-EX0627GEZZY	V	Zener	AA
D102	RH-EX0627GEZZY	V	Zener	AA
D351	VHD1SS119//-1Y	V	1SS119	AA
D691	VHD1SS119//-1Y	V	1SS119	AA
D692	VHD1SS119//-1Y	V	1SS119	AA
D701	RH-PX0270GEZZ+	V	PhotoDiode, Cassette LED	AC
D702	VHD1SS119//-1Y	V	1SS119	AA
D706	RH-PX0252GEZZ	V	PX0252GE, Supply Reel Sensor	AF
D707	RH-PX0252GEZZ	V	PX0252GE, Takeup Reel Sensor	AF
D710	VHD1SS119//-1Y	V	1SS119	AA
D712	VHD1SS119//-1Y	V	1SS119	AA
D721	VHD1SS119//-1Y	V	1SS119	AA
D731	VHD1SS119//-1Y	V	1SS119	AA
D801	VHD1SS119//-1Y	V	1SS119	AA
D823	RH-EX0634GEZZY	V	Zener	AB
D1901	RH-EX0670GEZZY	V	Zener	AB
D1902	VHD1SS119//-1Y	V	1SS119	AA

Ref. No.	Part No.	★	Description	Code
DUNTKB210TEV4(NC70H) DUNTKB210TEV5(NC65H) DUNTKB210TEV7(NC65S) VCR MAIN PWB UNIT(Continued)				
D1903	VHD1SS119//-1Y	V	1SS119	AA
D1904	VHD1SS119//-1Y	V	1SS119	AA
D1905	VHD1SS119//-1Y	V	1SS119	AA
D1907	VHD1SS119//-1Y	V	1SS119	AA
D1908	RH-EX0631GEZZY	V	Zener	AA
D1909	VHD1SS119//-1Y	V	1SS119	AA
D1930	VHDRL1N4003-1	V	RL1N4003	AA
D1971	RH-EX0673GEZZY	V	Zener	AB
D6005	VHD1SS119//-1Y	V	1SS119	AA
D6006	VHD1SS119//-1Y	V	1SS119	AA
P6101	VHPGP1F550T-1	V	PhotoDiode(NC70H)	
Q701	RH-PX0233GEZZ	V	PX0233GE, Start Sensor	AD
Q702	RH-PX0233GEZZ	V	PX0233GE, End Sensor	AD
PACKAGED CIRCUITS				
X502	RCRSB0232GEZZ+	V	Crystal, CRSB0232GE	AG
X701	RCRSB0205GEZZ+	V	Crystal, CRSB0205GE	AM
X702	RCRSB0138GEZZ	V	Crystal, CRSB0138GE	AD
COILS AND TRANSFORMER				
L102	VP-CF101K0000Y	V	Peaking, 100µH	AB
L104	VP-XF100K0000Y	V	Peaking, 10µH	AB
L105	VP-XF100K0000Y	V	Peaking, 10µH	AB
L106	VP-XF100K0000Y	V	Peaking, 10µH(NC65S)	AB
L107	VP-XF100K0000Y	V	Peaking, 10µH(NC65S)	AB
L201	VP-XF181K0000+	V	Peaking, 180µH (NC65H/NC70H)	AB
L201	VP-XF221K0000+	V	Peaking, 220µH(NC65S)	AB
L301	VP-MK101K0000+	V	Peaking, 100µH	AB
L304	VP-XF120K0000Y	V	Peaking, 12µH	AB
L351	VP-MK101K0000+	V	Peaking, 100µH	AB
L501	VP-XF560K0000+	V	Peaking, 56µH	AB
L502	VP-XF101K0000Y	V	Peaking, 100µH	AB
L503	VP-XF120K0000+	V	Peaking, 12µH	AB
L602	VP-DF221K0000Y	V	Peaking, 220µH	AB
⚠ T601	RTRNH0098GEZZ	V	OSC. Transformer	AE
CAPACITORS				
C104	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C105	VCEA0A0JW477M+	V	470 6.3V Electrolytic	AC
C106	VCKYPA1HF103Z+	V	0.01 50V Ceramic	AA
C112	VCKYD41HF104ZY	V	0.1 50V Ceramic	AA
C113	VCEA9A1HW105M+	V	1 50V Electrolytic	AB
C163	VCEA9M1HW475M+	V	4.7 50V Electrolytic	AB
C201	VCEA9M0JW476M+	V	47 6.3V Electrolytic	AB
C202	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C203	VCCCCY1HH151JS	V	150p 50V Ceramic	AA
C204	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C205	VCCCCY1HH220JS	V	22p 50V Ceramic	AA
C206	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C207	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C208	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C209	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C210	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C211	VCEA9M1HW335M+	V	3.3 50V Electrolytic	AB
C212	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C213	VCEA9M1HW225M+	V	2.2 50V Electrolytic	AB
C214	VCE9EM1HW105M+	V	1 50V Electrolytic	AB
C216	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C217	VCEA9M0JW476M+	V	47 6.3V Electrolytic	AB
C218	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C219	VCKYCY1CB104KS	V	0.1 16V Ceramic	AB
C220	VCKYCY1CB104KS	V	0.1 16V Ceramic	AB
C221	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C223	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C227	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C251	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C301	VCEA9M0JW476M+	V	47 6.3V Electrolytic	AB
C302	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C303	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C304	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C305	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C306	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C307	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C308	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C309	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C310	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C311	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C313	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C319	VCCCCY1HH3R0CS	V	3p 50V Ceramic	AA
C320	VCCCCY1HH3R0CS	V	3p 50V Ceramic	AA
C326	VCCCCY1HH220JS	V	22p 50V Ceramic	AA
C327	VCCCCY1HH150JS	V	15p 50V Ceramic	AA
C328	VCCCCY1HH150JS	V	15p 50V Ceramic	AA
C351	VCEA9M0JW476M+	V	47 6.3V Electrolytic	AB
C352	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C353	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C354	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C356	VCCCCY1HH101JS	V	100p 50V Ceramic	AA
C357	VCKYCY1CB104KS	V	0.1 16V Ceramic	AB
C358	VCKYCY1CB104KS	V	0.1 16V Ceramic	AB
C401	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C501	VCEA9M0JW107M+	V	100 6.3V Electrolytic	AB
C502	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C503	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C504	VCEA9M1HW225M+	V	2.2 50V Electrolytic	AB
C505	VCKYCY1EB223KS	V	0.022 25V Ceramic	AA
C506	VCEA9M1HW474M+	V	0.47 50V Electrolytic	AB
C507	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C508	VCEA9M1HW475M+	V	4.7 50V Electrolytic	AB
C509	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C510	VCCCCY1HH270JS	V	27p 50V Ceramic	AA
C512	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C513	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C514	VCKYCY1HF103ZS	V	0.01 50V Ceramic	AA
C515	VCKYCY1HB331KS	V	330p 50V Ceramic	AA
C516	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C517	VCEA9M1HW335M+	V	3.3 50V Electrolytic	AB
C518	VCKYCY1CB333KS	V	0.033 16V Ceramic	AA
C519	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C521	VCCCCY1HH5R0CS	V	5p 50V Ceramic	AA
C522	VCCCCY1HH120JS	V	12p 50V Ceramic	AA
C602	VCKYCY1EB123K	V	0.012 25V Ceramic	AA
C603	VCEA9M1CW226M+	V	22 16V Electrolytic	AB
C604	VCKYCY1HB102KS	V	1000p 50V Ceramic	AA
C605	VCEA9M1HW335M+	V	3.3 50V Electrolytic	AB
C606	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C607	VCEA9M1HW475M+	V	4.7 50V Electrolytic	AB
C608	VCEA9M1CW226M+	V	22 16V Electrolytic	AB
C610	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C611	VCKYCY1CF104ZS	V	0.1 16V Ceramic	AA
C613	VCKYCY1HB682K	V	6800p 50V Ceramic	AA
C617	VCEA9M1CW476M+	V	47 16V Electrolytic	AB
C618	VCKYCY1EB103KS	V	0.01 25V Ceramic	AA
C619	VCKYCY1EB103KS	V	0.01 25V Ceramic	AA
C620	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C621	VCQPYA2AA562J+	V	5600p 100V Mylar	AC
C622	VCKYCY1HB102KS	V	1000p 50V Ceramic	AA
C631	VCCCCY1HH101JS	V	100p 50V Ceramic	AA
C632	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C634	VCEA9M1HW475M+	V	4.7 50V Electrolytic	AB
C635	VCKYCY1HB221KY	V	220p 50V Ceramic	AA
C636	VCKYCY1HB222KS	V	2200p 50V Ceramic	AA
C651	VCEA9M1HW475M+	V	4.7 50V Electrolytic	AB
C653	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C654	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C655	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C656	VCKYCY1EB473KS	V	0.047 25V Ceramic	AB
C657	VCKYCY1EB153KS	V	0.015 25V Ceramic	AA
C658	VCEA9M0JW336M+	V	33 6.3V Electrolytic	AB
C660	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C661	VCEA9M1HW475M+	V	4.7 50V Electrolytic	AB
C663	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C664	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C665	VCEA9M1CW106M+	V	10 16V Electrolytic	AB

**DUNTKB210TEV4(NC70H)
DUNTKB210TEV5(NC65H)
DUNTKB210TEV7(NC65S)
VCR MAIN PWB UNIT(Continued)**

Ref. No.	Part No.	★			Description	Code
C666	VCKYCY1EB473KS	V	0.047	25V	Ceramic	AB
C667	VCKYCY1EB153KS	V	0.015	25V	Ceramic	AA
C668	VCEA9M0JW336M+	V	33	6.3V	Electrolytic	AB
C670	VCEA9M1HW105M+	V	1	50V	Electrolytic	AB
C671	VCEA9M1CW107M+	V	100	16V	Electrolytic	AB
C673	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C674	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C675	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C676	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C677	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C678	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C679	VCKYCY1CF224ZS	V	0.22	16V	Ceramic	AB
C681	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C682	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C683	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C686	VCKYCY0JF105ZS	V	1	6.3V	Ceramic	AB
C687	VCKYCY0JF105ZS	V	1	6.3V	Ceramic	AB
C691	VCEA9M0JW227M+	V	220	6.3V	Electrolytic	AB
C701	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C702	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C703	VCKYCY0JF105ZS	V	1	6.3V	Ceramic	AB
C704	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C705	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C706	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C707	VCCCCY1HH120JS	V	12p	50V	Ceramic	AA
C708	VCCCCY1HH120JS	V	12p	50V	Ceramic	AA
C709	VCCCCY1HH180JS	V	18p	50V	Ceramic	AA
C710	VCCCCY1HH180JS	V	18p	50V	Ceramic	AA
C713	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C715	VCCCCY1HH101JS	V	100p	50V	Ceramic	AA
C716	VCKYCY0JB105KY	V	1	6.3V	Ceramic	AC
C717	VCKYCY0JF105ZS	V	1	6.3V	Ceramic	AB
C718	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C721	VCKYCY1EB103KS	V	0.01	25V	Ceramic	AA
C722	VCEA9M0JW107M+	V	100	6.3V	Electrolytic	AB
C723	VCKYCY1EB473KS	V	0.047	25V	Ceramic	AB
C724	VCKYCY1EB473KS	V	0.047	25V	Ceramic	AB
C725	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C726	VCKYCY1HB102KS	V	1000p	50V	Ceramic	AA
C728	VCKYD41CY103NY	V	0.01	16V	Ceramic	AB
C729	VCKYCY1HB222KS	V	2200p	50V	Ceramic	AA
C730	VCKYCY1EB103KS	V	0.01	25V	Ceramic	AA
C731	VCKYCY1EB103KS	V	0.01	25V	Ceramic	AA
C732	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C733	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C734	VCKYCY1HB102KS	V	1000p	50V	Ceramic	AA
C735	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C740	VCKYCY1HB221KS	V	220p	50V	Ceramic	AA
C741	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C742	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C743	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C744	VCKYCY1HB222KY	V	2200p	50V	Ceramic	AA
C745	VCKYCY1HB682K	V	6800p	50V	Ceramic	AA
C750	VCEA2A1VW107M+	V	100	35V	Electrolytic	AC
C751	VCKYD41CY103NY	V	0.01	16V	Ceramic	AB
C752	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C754	VCKYD41CY103NY	V	0.01	16V	Ceramic	AB
C755	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C760	VCEA9M1CW476M+	V	47	16V	Electrolytic	AB
C781	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C782	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C783	VCKYCY1HB102KS	V	1000p	50V	Ceramic	AA
C784	VCKYCY1HB102KS	V	1000p	50V	Ceramic	AA
C785	VCKYCY1HF103ZS	V	0.01	50V	Ceramic	AA
C786	VCEA9M1HW105M+	V	1	50V	Electrolytic	AB
C787	VCEA2A0JW477M+	V	470	6.3V	Electrolytic	AC
C788	VCEA0A0JW338M	V	3300	6.3V	Electrolytic	AD
C789	VCEA0A0JW228M	V	2200	6.3V	Electrolytic	AD
C791	VCKYD41HF104ZY	V	0.1	50V	Ceramic	AA
C797	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C798	VCEAKM1CW476M+	V	47	16V	Electrolytic	AB
C801	VCCCCY1HH470JS	V	47p	50V	Ceramic	AA
C802	VCCCCY1HH470JS	V	47p	50V	Ceramic	AA
C822	VCEA9A1CW106M+	V	10	16V	Electrolytic	AB
C823	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C862	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C863	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C864	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C947	VCEA0A1CW107M+	V	100	16V	Electrolytic	AC
C952	VCEA9A0JW227M+	V	220	6.3V	Electrolytic	AB
C1901	VCEA9M1HW105M+	V	1	50V	Electrolytic	AB
C1902	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C1905	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C1906	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C1907	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C1971	VCEA9M1HW105M+	V	1	50V	Electrolytic	AB
C2014	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C2015	VCKYCY1CB104KS	V	0.1	16V	Ceramic	AB
C2016	VCKYCY1CB104KS	V	0.1	16V	Ceramic	AB
C2017	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C2019	VCKYCY1CB104KS	V	0.1	16V	Ceramic	AB
C2020	VCEA9M0JW107M+	V	100	6.3V	Electrolytic	AB
C2021	VCEA0A0JW477M+	V	470	6.3V	Electrolytic	AC
C2026	VCKYCY1CF104ZS	V	0.1	16V	Ceramic	AA
C6028	VCEA9M0JW227M+	V	220	6.3V	Electrolytic	AB
C6030	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C6031	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C6032	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C6033	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C6034	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
C6035	VCKYCY1HB222KS	V	2200p	50V	Ceramic	AA
C6036	VCKYCY1HB222KS	V	2200p	50V	Ceramic	AA
C6060	VCKYCY1HB221KS	V	220p	50V	Ceramic	AA
C6061	VCKYCY1HB221KS	V	220p	50V	Ceramic	AA
C6062	VCKYCY1HB221KS	V	220p	50V	Ceramic	AA
C6063	VCKYCY1HB221KS	V	220p	50V	Ceramic	AA
C6101	VCKYCY1EB103KS	V	0.01	25V	Ceramic	AA
C6102	VCKYCY1EB103KS	V	0.01	25V	Ceramic	AA
C6103	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C6104	VCKYCY1EB103KS	V	0.01	25V	Ceramic	AA
C6106	VCEA9M0JW107M+	V	100	6.3V	Electrolytic	AB

RESISTORS

RJ1	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
RJ29	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
RJ201	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
RJ202	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
RJ203	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
RJ204	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
RJ210	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA
RJ702	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
RJ703	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R61	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R104	VRS-CY1JF681JS	V	680	1/16W	Metal Oxide	AA
R105	VRS-CY1JF681JS	V	680	1/16W	Metal Oxide	AA
R111	VRD-RA2BE153JY	V	15k	1/8W	Carbon	AA
R112	VRD-RA2BE153JY	V	15k	1/8W	Carbon	AA
R155	VRD-RA2BE224JY	V	220k	1/8W	Carbon	AA
R177	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R178	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R201	VRS-CY1JF682JS	V	6.8k	1/16W	Metal Oxide	AA
R202	VRS-CY1JF182JS	V	1.8k	1/16W	Metal Oxide	AA
R203	VRS-CY1JF822JS	V	8.2k	1/16W	Metal Oxide	AA
R207	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R208	VRS-CY1JF471JS	V	470	1/16W	Metal Oxide	AA
R209	VRS-CY1JF472JS	V	4.7k	1/16W	Metal Oxide	AA
R210	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R211	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R212	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R241	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R252	VRS-CY1JF151JS	V	150	1/16W	Metal Oxide	AA
R253	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R254	VRS-CY1JF183JS	V	18k	1/16W	Metal Oxide	AA
R255	VRS-CY1JF151JS	V	150	1/16W	Metal Oxide	AA
R301	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA

**DUNTKB210TEV4(NC70H)
DUNTKB210TEV5(NC65H)
DUNTKB210TEV7(NC65S)
VCR MAIN PWB UNIT(Continued)**

Ref. No.	Part No.	★	Description			Code
R309	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R312	VRD-RA2BE681JY	V	680	1/8W	Carbon	AA
R313	VRS-CY1JF562JS	V	5.6k	1/16W	Metal Oxide	AA
R314	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA
R351	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R401	VRS-CY1JF562JS	V	5.6k	1/16W	Metal Oxide	AA
R402	VRD-RA2BE472JY	V	4.7k	1/8W	Carbon	AA
R501	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R502	VRS-CY1JF273JS	V	27k	1/16W	Metal Oxide	AA
R504	VRS-CY1JF221JS	V	220	1/16W	Metal Oxide	AA
R505	VRS-CY1JF224JS	V	220k (NC65S)	1/16W	Metal Oxide	AA
R511	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide	AA
R512	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R601	VRS-CY1JF183JS	V	18k	1/16W	Metal Oxide	AA
R602	VRS-CY1JF274JS	V	270k	1/16W	Metal Oxide	AA
R603	VRS-CY1JF181J	V	180	1/16W	Metal Oxide	AA
R604	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R605	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R606	VRS-CY1JF333JS	V	33k	1/16W	Metal Oxide	AA
R609	VRS-CY1JF562JS	V	5.6k	1/16W	Metal Oxide	AA
R610	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R611	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R615	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R616	VRS-CY1JF183JS	V	18k	1/16W	Metal Oxide	AA
R619	VRS-CY1JF470JS	V	47	1/16W	Metal Oxide	AA
R620	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R621	VRD-RA2EE4R7JY	V	4.7	1/4W	Carbon	AA
R623	VRD-RA2BE273JY	V	27k	1/8W	Carbon	AA
R624	VRS-CY1JF472JS	V	4.7k	1/16W	Metal Oxide	AA
R625	VRS-CY1JF222JS	V	2.2k	1/16W	Metal Oxide	AA
R627	VRS-CY1JF392JS	V	3.9k	1/16W	Metal Oxide	AA
R631	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R632	VRS-CY1JF104JY	V	100k	1/16W	Metal Oxide	AA
R633	VRS-CY1JF104JY	V	100k	1/16W	Metal Oxide	AA
R634	VRS-CY1JF101JY	V	100	1/16W	Metal Oxide	AA
R638	VRD-RA2BE473JY	V	47k	1/8W	Carbon	AA
R639	VRS-CY1JF333JY	V	33k	1/16W	Metal Oxide	AA
R640	VRS-CY1JF682JY	V	6.8k	1/16W	Metal Oxide	AA
R651	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R652	VRS-CY1JF332JS	V	3.3k	1/16W	Metal Oxide	AA
R653	VRS-CY1JF393JS	V	39k	1/16W	Metal Oxide	AA
R654	VRS-CY1JF392JS	V	3.9k	1/16W	Metal Oxide	AA
R655	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R656	VRS-CY1JF392JS	V	3.9k	1/16W	Metal Oxide	AA
R657	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R658	VRS-CY1JF562JS	V	5.6k	1/16W	Metal Oxide	AA
R659	VRS-CY1JF472JS	V	4.7k	1/16W	Metal Oxide	AA
R660	VRS-CY1JF471JS	V	470	1/16W	Metal Oxide	AA
R661	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R662	VRS-CY1JF332JS	V	3.3k	1/16W	Metal Oxide	AA
R663	VRS-CY1JF393JS	V	39k	1/16W	Metal Oxide	AA
R664	VRS-CY1JF392JS	V	3.9k	1/16W	Metal Oxide	AA
R665	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R666	VRS-CY1JF392JS	V	3.9k	1/16W	Metal Oxide	AA
R667	VRS-CY1JF222JS	V	2.2k	1/16W	Metal Oxide	AA
R668	VRD-RA2BE562JY	V	5.6k	1/8W	Carbon	AA
R669	VRS-CY1JF472JS	V	4.7k	1/16W	Metal Oxide	AA
R670	VRS-CY1JF471JS	V	470	1/16W	Metal Oxide	AA
R671	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R672	VRS-CY1JF151JS	V	150	1/16W	Metal Oxide	AA
R673	VRS-CY1JF151JS	V	150	1/16W	Metal Oxide	AA
R676	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R678	VRS-CY1JF273JS	V	27k	1/16W	Metal Oxide	AA
R681	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R682	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R685	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R686	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R691	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R693	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R702	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R704	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R705	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R706	VRS-CY1JF564JS	V	560k	1/16W	Metal Oxide	AA
R708	VRS-CY1JF332JS	V	3.3k	1/16W	Metal Oxide	AA
R709	VRS-CY1JF222JS	V	2.2k	1/16W	Metal Oxide	AA
R711	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R713	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R714	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R715	VRS-CY1JF472JS	V	4.7k	1/16W	Metal Oxide	AA
R716	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R717	VRS-CY1JF123JS	V	12k	1/16W	Metal Oxide	AA
R718	VRS-CY1JF563JS	V	56k	1/16W	Metal Oxide	AA
R719	VRS-CY1JF183JS	V	18k	1/16W	Metal Oxide	AA
R720	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R721	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R722	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R724	VRS-CY1JF104JS	V	100k	1/16W	Metal Oxide	AA
R725	VRS-CY1JF332JS	V	3.3k	1/16W	Metal Oxide	AA
R726	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R727	VRS-CY1JF154JS	V	150k	1/16W	Metal Oxide	AA
R728	VRS-CY1JF332JS	V	3.3k	1/16W	Metal Oxide	AA
R729	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R730	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R731	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R732	VRS-CY1JF154JS	V	150k	1/16W	Metal Oxide	AA
R733	VRS-CY1JF105JS	V	1M	1/16W	Metal Oxide	AA
R735	VRS-CY1JF104JS	V	100k	1/16W	Metal Oxide	AA
R736	VRS-CY1JF822JS	V	8.2k	1/16W	Metal Oxide	AA
R737	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R738	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R739	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R741	VRS-CY1JF123JS	V	12k	1/16W	Metal Oxide	AA
R742	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R743	VRS-CY1JF563JS	V	56k	1/16W	Metal Oxide	AA
R744	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R745	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R746	VRS-CY1JF182JS	V	1.8k	1/16W	Metal Oxide	AA
R747	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R748	VRS-CY1JF681JS	V	680	1/16W	Metal Oxide	AA
R750	VRD-RA2BE473JY	V	47k	1/8W	Carbon	AA
R751	VRD-RA2BE562JY	V	5.6k	1/8W	Carbon	AA
R752	VRD-RA2BE562JY	V	5.6k	1/8W	Carbon	AA
R754	VRD-RA2EE181JY	V	180	1/4W	Carbon	AA
R756	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R760	VRG-SC2EB1R0J+	V	1	1/4W	Fuse Resistor	AB
R771	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R781	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R782	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R783	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R784	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R785	VRD-RA2BE391JY	V	390	1/8W	Carbon	AA
R786	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R788	VRS-CY1JF104JS	V	100k	1/16W	Metal Oxide	AA
R789	VRD-RA2BE391JY	V	390	1/8W	Carbon	AA
R790	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R792	VRS-CY1JF104JS	V	100k	1/16W	Metal Oxide	AA
R796	VRD-RM2HD271JY	V	270	1/2W	Carbon	AA
R797	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R798	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R799	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R802	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R803	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R805	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R806	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R811	VRD-RA2BE183JY	V	18k	1/8W	Carbon	AA
R812	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R821	VRD-RA2BE183JY	V	18k	1/8W	Carbon	AA
R841	VRD-RA2BE221JY	V	220	1/8W	Carbon	AA
R842	VRD-RA2BE221JY	V	220	1/8W	Carbon	AA
R843	VRD-RA2BE221JY	V	220	1/8W	Carbon	AA
R844	VRD-RA2BE221JY	V	220	1/8W	Carbon	AA
R853	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R855	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R856	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA

DUNTKB210TEV4(NC70H)
DUNTKB210TEV5(NC65H)
DUNTKB210TEV7(NC65S)
VCR MAIN PWB UNIT(Continued)

Ref. No.	Part No.	★	Description			Code
R857	VRD-RA2BE472JY	V	4.7k	1/8W	Carbon	AA
R858	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R859	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R867	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R1203	VRS-CY1JF750JS	V	75	1/16W	Metal Oxide	AA
R1204	VRS-CY1JF750JS	V	75	1/16W	Metal Oxide	AA
R1208	VRS-CY1JF750JS	V	75	1/16W	Metal Oxide	AA
R1861	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R1901	VRD-RA2BE472JY	V	4.7k	1/8W	Carbon	AA
R1902	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R1906	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R1907	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R1909	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R1910	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R1912	VRD-RA2BE471JY	V	470	1/8W	Carbon	AA
R1913	VRD-RA2BE471JY	V	470	1/8W	Carbon	AA
R1915	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R1916	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R1917	VRD-RM2HD102JY	V	1k	1/2W	Carbon	AA
R1918	VRS-CY1JF224JS	V	220k	1/16W	Metal Oxide	AA
R1919	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R1920	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R1921	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R1922	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R1923	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R1971	VRD-RM2HD152JY	V	1.5k	1/2W	Carbon	AA
R2018	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R6001	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R6036	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R6037	VRS-CY1JF102JS	V	1k	1/16W	Metal Oxide	AA
R6038	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R6039	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R6040	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R6041	VRS-CY1JF223JS	V	22k	1/16W	Metal Oxide	AA
R6042	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R6043	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R6044	VRS-CY1JF474JS	V	470k	1/16W	Metal Oxide	AA
R6045	VRS-CY1JF474JS	V	470k	1/16W	Metal Oxide	AA
R6046	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R6047	VRS-CY1JF153JS	V	15k	1/16W	Metal Oxide	AA
R6048	VRS-CY1JF681JS	V	680	1/16W	Metal Oxide	AA
R6049	VRD-RA2BE681JY	V	680	1/8W	Carbon	AA
R6050	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R6051	VRS-CY1JF473JS	V	47k	1/16W	Metal Oxide	AA
R6052	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R6053	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R6101	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R6102	VRS-CY1JF272JS	V	2.7k	1/16W	Metal Oxide	AA
R6103	VRD-RM2HD101JY	V	100	1/2W	Carbon	AA
R6104	VRD-RA2BE151JY	V	150	1/8W	Carbon	AA
R6105	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R6106	VRS-CY1JF681JS	V	680	1/16W	Metal Oxide	AA
R6107	VRS-CY1JF222JS	V	2.2k	1/16W	Metal Oxide	AA
R6108	VRS-CY1JF103JS	V	10k	1/16W	Metal Oxide	AA
R6151	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R6152	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R6802	VRS-CY1JF000JS	V	0	1/16W	Metal Oxide	AA
R7701	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7704	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7705	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R7706	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R7708	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R7709	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7710	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7711	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7712	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7713	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7714	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7715	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7716	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7717	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7721	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7722	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7723	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7724	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7725	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7726	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7727	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7728	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7729	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7730	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7731	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7732	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7733	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7734	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R7735	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R7736	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7737	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R7738	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA
R7739	VRS-CY1JF101JS	V	100	1/16W	Metal Oxide	AA

SWITCHES

S701	QSW-F0042AJZZ	V	Switch, REC Tip SW	AG
S704	QSW-RA001WJZZ	V	Switch	AF

BALUNES

FB702	RBLN-0090GEZZY	V	Balun, BLN-0090GE	AB
FB1202	RBLN-0077TAZZS	V	Balun, BLN-0077TA	AB
FB1203	RBLN-0077TAZZS	V	Balun, BLN-0077TA	AB
JA317	RBLN-0090GEZZY	V	Balun, BLN-0090GE	AB

MISCELLANEOUS PARTS

CN501	QSOCN2999REZZ	V	Socket, 29Pin	AE
CN801	QSOCN0895REZZ	V	Socket, 8Pin	AC
CN802	QSOCN1095REZZ	V	Socket, 10Pin	AC
CN803	QSOCN1595REZZ	V	Socket, 15Pin	AD
J1201	QSOCD0445AJZZ	V	Socket, 5Pin	AF
J1202	QJAKG0093CEZZ	V	Jack, 14Pin	AH
J1205	QJAKGA010WJZZ	V	Jack, 5Pin	AH
P302	QSOCN1899REZZ	V	Socket, 18Pin	AD
P303	QSOCN0899REZZ	V	Socket, 8Pin	
P701	QPLGZ1283GEZZ	V	Plug, 12Pin	AE
P7003	QPLGN1278GEZZ	V	Plug, 12Pin	AC
SC301	QSOCNA006WJZZ	V	Socket, 9PIn	AD
SC601	QSOCN0611REN1	V	Socket, 6Pin	AC
SC602	QSOCZ0293GEZZ	V	Socket, 2Pin	AC
SC2504	QSOCN1995REZZ	V	Socket, 19Pin	AD
SC2505	QSOCN1995REZZ	V	Socket, 19Pin	AD
TP201	QPLGN0447REZZ	V	Plug, 4Pin	AA
W851	LHLDZ2185AJ00	V	Holder	AB
W852	LHLDZ2185AJ00	V	Holder	AB

DUNTKB372TEV1
TERMINAL PWB UNIT

INTEGRATED CIRCUITS

IC1701	VHiMSP3417G-1Q	V	MSP3417G, MPX Decoder	AY
IC1801	VHiLC74793J1EY	V	LC74793J, VPS/PDC	AV
IC2501	VHiLA73024V-1Y	V	LA73024V, Selector	
IC2502	VHiMM1506XN-1Y	V	MM1506XN, R Selector	AD
IC2503	VHiMM1506XN-1Y	V	MM1506XN, G Selector	AD
IC2504	VHiMM1506XN-1Y	V	MM1506XN, B Selector	AD
IC2591	VHiPQ30RV11-1	V	PQ30RV11	AF
IC2701	VHiMM1567AJ-1Y	V	MM1567AJ, LPF+ Driver	AM
IC2706	VHiMM1113XF1EY	V	MM1113XF, Comp/Y Selector	AE
IC2707	VHiMM1505XN-1Y	V	MM1505XN, C Driver	
IC2708	VHiMM1508XN-1Y	V	MM1508XN, Y Driver	AE

TRANSISTORS

Q1701	VS2PB709AR/-1Y	V	2PB709AR	AB
Q1702	VSKRC104S//-1Y	V	KRC104S	AA
Q2301	VSKRC104S//-1Y	V	KRC104S	AA
Q2302	VSKRC104S//-1Y	V	KRC104S	AA

Ref. No.	Part No.	★	Description	Code
DUNTKB372TEV1 TERMINAL PWB UNIT(Continued)				
Q2305	VSKRA102S//-1Y	V	KRA102S	AA
Q2306	VSKRC104S//-1Y	V	KRC104S	AA
Q2316	VS2PD601AR/-1Y	V	2PD601AR	AB
Q2503	VSKRC104S//-1Y	V	KRC104S	AA
Q2505	VS2PD601AR/-1Y	V	2PD601AR	AB
Q2506	VS2PD601AR/-1Y	V	2PD601AR	AB
Q2507	VS2PD601AR/-1Y	V	2PD601AR	AB
Q2701	VS2PB709AR/-1Y	V	2PB709AR	AB
Q2702	VS2PB709AR/-1Y	V	2PB709AR	AB
Q2703	VS2PB709AR/-1Y	V	2PB709AR	AB
Q2704	VS2PB709AR/-1Y	V	2PB709AR	AB
Q2705	VS2PB709AR/-1Y	V	2PB709AR	AB
Q2901	VS2PB709AR/-1Y	V	2PB709AR	AB
DIODES				
D1701	RH-EX0626GEZZY	V	Zener, 8.2A	AB
D2307	VHD1SS119//-1Y	V	1SS119	AA
D2503	RH-EX0627GEZZY	V	Zener	AA
D2505	RH-EX0646GEZZY	V	Zener	AA
D2506	RH-EX0627GEZZY	V	Zener	AA
D2507	RH-EX0646GEZZY	V	Zener	AA
D2508	RH-EX0646GEZZY	V	Zener	AA
D2509	RH-EX0646GEZZY	V	Zener	AA
D2510	RH-EX0646GEZZY	V	Zener	AA
D2511	RH-EX0646GEZZY	V	Zener	AA
D2512	RH-EX0646GEZZY	V	Zener	AA
D2513	RH-EX0627GEZZY	V	Zener	AA
D2514	RH-EX0627GEZZY	V	Zener	AA
D2516	RH-EX0627GEZZY	V	Zener	AA
D2517	RH-EX0646GEZZY	V	Zener	AA
D2518	RH-EX0646GEZZY	V	Zener	AA
D2519	RH-EX0646GEZZY	V	Zener	AA
D2520	RH-EX0646GEZZY	V	Zener	AA
D2521	RH-EX0627GEZZY	V	Zener	AA
D2522	RH-EX0627GEZZY	V	Zener	AA
D2526	RH-EX0627GEZZY	V	Zener	AA
D2527	RH-EX0627GEZZY	V	Zener	AA
D2528	RH-EX0627GEZZY	V	Zener	AA
D2572	RH-EX0627GEZZY	V	Zener	AA
PACKAGED CIRCUIT				
X1701	RCRSB0249GEZZ+	V	Crystal, 18.432MHz	AF
COILS				
L1703	VP-XF100J0000Y	V	Peaking, 10µH	AB
L1704	VP-XF100J0000Y	V	Peaking, 10µH	AB
L2701	VP-XF470K0000Y	V	Peaking, 47µH	AB
CAPACITORS				
C1701	VCCSD41HL220JY	V	22p 50V Ceramic	AM
C1702	VCCCD41HH470JY	V	47p 50V Ceramic	AB
C1704	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C1705	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C1706	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C1707	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C1708	VCEA9M1CW226M+	V	22 16V Electrolytic	AB
C1709	VCEA9M1CW226M+	V	22 16V Electrolytic	AB
C1710	VCCCCY1HH5R0CY	V	5p 50V Ceramic	AA
C1711	VCCCCY1HH6R0DY	V	6p 50V Ceramic	AA
C1712	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C1713	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C1714	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C1715	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C1718	VCEA9M1CW226M+	V	22 16V Electrolytic	AB
C1720	VCCCCY1HH470JY	V	47p 50V Ceramic	AA
C1723	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C1730	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C1731	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C1735	VCKYCY1HB122KY	V	1200p 50V Ceramic	AA
C1738	VCKYCY1HB122KY	V	1200p 50V Ceramic	AA
C1753	VCKYCY1HB331KY	V	330p 50V Ceramic	AA
C1803	VCQYTA1HM563J+	V	0.056 50V Mylar	AB
C1804	VCEA9M1HW475M+	V	4.7 50V Electrolytic	AB
C1805	VCEA9A1HW105M+	V	1 50V Electrolytic	AB
C1806	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C1807	VCKYD41CY103NY	V	0.01 16V Ceramic	AB
C1811	VCEA9M0JW476M+	V	47 6.3V Electrolytic	AB
C1812	VCKYD41CY103NY	V	0.01 16V Ceramic	AB
C2501	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2502	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2503	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2504	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2505	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2506	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2507	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2508	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2509	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2510	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2511	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2512	VCEA0A1CW337M+	V	330 16V Electrolytic	AC
C2513	VCKYCY1CF104ZY	V	0.1 16V Ceramic	AA
C2514	VCKYCY1CF104ZY	V	0.1 16V Ceramic	AA
C2515	VCEA0A0JW477M+	V	470 6.3V Electrolytic	AC
C2518	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2519	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2520	VCKYD41CY103NY	V	0.01 16V Ceramic	AB
C2522	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C2523	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2524	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2530	VCKYCY1CF104ZY	V	0.1 16V Ceramic	AA
C2531	VCEA9M0JW227M+	V	220 6.3V Electrolytic	AB
C2532	VCE9EM1AW106M	V	10 10V Electrolytic	AB
C2533	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2534	VCKYCY1CF104ZY	V	0.1 16V Ceramic	AA
C2535	VCE9EM1AW106M	V	10 10V Electrolytic	AB
C2536	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2538	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2539	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2540	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2541	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2542	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2543	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2544	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2545	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2546	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2547	VCCCCY1HH101JY	V	100p 50V Ceramic	AA
C2560	VCE9EM1AW106M	V	10 10V Electrolytic	AB
C2561	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2562	VCEA9M0JW227M+	V	220 6.3V Electrolytic	AB
C2563	VCKYCY1CF104ZY	V	0.1 16V Ceramic	AA
C2591	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2592	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C2701	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2702	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2703	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2704	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2705	VCEA9M1HW105M+	V	1 50V Electrolytic	AB
C2707	VCKYCY1EB103KY	V	0.01 25V Ceramic	AA
C2708	VCEA9M0JW107M+	V	100 6.3V Electrolytic	AB
C2710	VCEA9M0JW476M+	V	47 6.3V Electrolytic	AB
C2742	VCKYD41HF104ZY	V	0.1 50V Ceramic	AA
C2743	VCE9EM1AW106M	V	10 10V Electrolytic	AB
C2744	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2745	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C2746	VCEA9M1CW106M+	V	10 16V Electrolytic	AB
C2748	VCEA9M0JW227M+	V	220 6.3V Electrolytic	AB
C2749	VCKYCY1CF104ZY	V	0.1 16V Ceramic	AA
C2750	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C2751	VCKYD41CY103NY	V	0.01 16V Ceramic	AB
C2752	VCEA0A0JW477M+	V	470 6.3V Electrolytic	AC
C2753	VCKYCY1HF103ZY	V	0.01 50V Ceramic	AA
C2758	VCEA9M0JW227M+	V	220 6.3V Electrolytic	AB
RESISTORS				
RJ1	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
RJ2	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA
RJ3	VRS-CY1JF000JY	V	0 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description			Code
DUNTKB372TEV1 TERMINAL PWB UNIT(Continued)						
RJ4	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA
RJ5	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA
RJ6	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA
RJ7	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA
RJ8	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide	AA
R1703	VRD-RA2BE473JY	V	47k	1/8W	Carbon	AA
R1710	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R1711	VRD-RA2BE101JY	V	100	1/8W	Carbon	AA
R1714	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R1720	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R1723	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R1748	VRD-RM2HD221JY	V	220	1/2W	Carbon	AA
R1749	VRS-CY1JF333JY	V	33k	1/16W	Metal Oxide	AA
R1750	VRS-CY1JF104JY	V	100k	1/16W	Metal Oxide	AA
R1801	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R1807	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R1808	VRS-CY1JF562JY	V	5.6k	1/16W	Metal Oxide	AA
R1810	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R2008	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2236	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R2238	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R2242	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R2301	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R2341	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R2342	VRD-RA2EE750J	V	75	1/4W	Carbon	AA
R2501	VRS-CY1JF123JY	V	12k	1/16W	Metal Oxide	AA
R2502	VRS-CY1JF123JY	V	12k	1/16W	Metal Oxide	AA
R2503	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2505	VRD-RA2BE821JY	V	820	1/8W	Carbon	AA
R2506	VRD-RA2BE821JY	V	820	1/8W	Carbon	AA
R2507	VRS-CY1JF123JY	V	12k	1/16W	Metal Oxide	AA
R2508	VRS-CY1JF123JY	V	12k	1/16W	Metal Oxide	AA
R2509	VRS-CY1JF821JY	V	820	1/16W	Metal Oxide	AA
R2510	VRS-CY1JF821JY	V	820	1/16W	Metal Oxide	AA
R2511	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2512	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2513	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2514	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2515	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2522	VRD-RA2BE123JY	V	12k	1/8W	Carbon	AA
R2523	VRD-RA2BE123JY	V	12k	1/8W	Carbon	AA
R2544	VRS-CY1JF101JY	V	100	1/16W	Metal Oxide	AA
R2545	VRD-RA2BE470JY	V	47	1/8W	Carbon	AA
R2546	VRS-CY1JF681JY	V	680	1/16W	Metal Oxide	AA
R2547	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2551	VRS-CY1JF101JY	V	100	1/16W	Metal Oxide	AA
R2552	VRD-RA2BE470JY	V	47	1/8W	Carbon	AA
R2553	VRS-CY1JF681JY	V	680	1/16W	Metal Oxide	AA
R2554	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2556	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R2558	VRS-CY1JF101JY	V	100	1/16W	Metal Oxide	AA
R2563	VRD-RA2BE470JY	V	47	1/8W	Carbon	AA
R2564	VRS-CY1JF681JY	V	680	1/16W	Metal Oxide	AA
R2565	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2570	VRD-RA2BE750JY	V	75	1/8W	Carbon	AA
R2591	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R2592	VRS-CY1JF122JY	V	1.2k	1/16W	Metal Oxide	AA
R2593	VRS-CY1JF473JY	V	47k	1/16W	Metal Oxide	AA
R2701	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2702	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2704	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2705	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2706	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2710	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2711	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2713	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2714	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2715	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2717	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2718	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2719	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2721	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide	AA
R2901	VRD-RA2EE331JY	U	330	1/4W	Carbon	
R2903	VRD-RA2BE183JY	V	18k	1/8W	Carbon	AA
R2904	VRS-CY1JF153JY	V	15k	1/16W	Metal Oxide	AA
R2907	VRD-RA2BE821JY	V	820	1/8W	Carbon	AA
R2909	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide	AA
SWITCH						
S2501	QSW-S0259GEZZ	V	Switch			AD
BALUNES						
FB2501	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2502	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2505	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2506	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2507	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2508	RBLN-0076TAZZY	V	Balun, BLN-0076TA			AC
FB2509	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2510	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2511	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2512	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2513	RBLN-0077TAZZY	V	Balun, BLN-0077TA			AB
FB2514	RBLN-0076TAZZY	V	Balun, BLN-0076TA			AC
MISCELLANEOUS PARTS						
CN2701	QSOCN1199REZZ	V	Socket, 11Pin			AD
SC2501	QSOCZ4297UMZZ	V	Socket, 42Pin			AH
SC2512	QSOCN0899REZZ	V	Socket, 8Pin			
SC2513	QSOCN1899REZZ	V	Socket, 18Pin			AD
SC2721	QSOCN1995REZZ	V	Socket, 19Pin			AD
SC2722	QSOCN1995REZZ	V	Socket, 19Pin			AD
DUNTKB374TEV1 DVD OPERATION PWB UNIT						
DISPLAYS						
LCD8002	RLCDD0005GEZZ	V	Display			AN
LCD8052	RLCDDA006WJZZ	V	Display			AM
INTEGRATED CIRCUITS						
IC8002	VHiPT6596++-1Q	V	PT6596++, LCD Driver			AM
IC8051	VHiPT6596++-1Q	V	PT6596++, LCD Driver			AM
TRANSISTOR						
Q8050	VSKRC102S//-1Y	V	KRC102S			AA
DIODES						
D8001	RH-PXA008WJZZ+	V	PhotoDiode, B/L LED			AF
D8002	RH-PXA008WJZZ+	V	PhotoDiode, B/L LED			AF
D8005	RH-PX0297GEZZ+	V	PhotoDiode, DVD LED			AD
D8006	RH-PXA008WJZZ+	V	PhotoDiode, VCR LED			AF
D8007	RH-PX0297GEZZ+	V	PhotoDiode, DVD LED			AD
D8051	RH-PX0449AJZZ+	V	PhotoDiode, Timer LED			AC
D8053	RH-PX0449AJZZ+	V	PhotoDiode, Dub LED			AC
D8054	RH-PXA021WJZZ+	V	PhotoDiode, B/L LED			AD
D8055	RH-PXA021WJZZ+	V	PhotoDiode, B/L LED			AD
D8056	RH-PXA021WJZZ+	V	PhotoDiode, B/L LED			AD
D8057	RH-PXA021WJZZ+	V	PhotoDiode, B/L LED			AD
CAPACITORS						
C8001	VCKYCY1HF103ZY	V	0.01	50V	Ceramic	AA
C8002	VCKYCY1HF103ZY	V	0.01	50V	Ceramic	AA
C8003	VCKYCY1HF103ZY	V	0.01	50V	Ceramic	AA
C8004	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C8005	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB
C8006	VCKYCY1HF103ZY	V	0.01	50V	Ceramic	AA
C8007	VCCCCY1HH101JY	V	100p	50V	Ceramic	AA
C8008	VCCCCY1HH100DY	V	10p	50V	Ceramic	AA
C8009	VCCCCY1HH101JY	V	100p	50V	Ceramic	AA
C8010	VCKYCY1HB102KY	V	1000p	50V	Ceramic	AA
C8051	VCKYCY1HF103ZY	V	0.01	50V	Ceramic	AA
C8052	VCKYCY1HF103ZY	V	0.01	50V	Ceramic	AA
C8053	VCKYCY1HF103ZY	V	0.01	50V	Ceramic	AA
C8054	VCEA9M1CW106M+	V	10	16V	Electrolytic	AB

Ref. No.	Part No.	★	Description	Code

DUNTKB374TEV1 DVD OPERATION PWB UNIT(Continued)

C8055	VCKYCY1HF103ZY	V	0.01	50V	Ceramic		AA
C8056	VCKYCY1HB102KY	V	1000p	50V	Ceramic		AA
C8057	VCKYCY1HB102KY	V	1000p	50V	Ceramic		AA
C8058	VCKYCY1HB102KY	V	1000p	50V	Ceramic		AA
C8059	VCKYCY1HB102KY	V	1000p	50V	Ceramic		AA

RESISTORS

RJ801	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide		AA
RJ803	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide		AA
RJ805	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide		AA
R8001	VRS-CY1JF473JY	V	47k	1/16W	Metal Oxide		AA
R8002	VRD-RA2BE391JY	V	390	1/8W	Carbon		AA
R8005	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8006	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8007	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8008	VRD-RA2BE101JY	V	100	1/8W	Carbon		AA
R8009	VRD-RA2BE271JY	V	270	1/8W	Carbon		AA
R8010	VRD-RA2BE471JY	V	470	1/8W	Carbon		AA
R8050	VRD-RA2BE271JY	V	270	1/8W	Carbon		AA
R8051	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8052	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8053	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8056	VRS-CY1JF473JY	V	47k	1/16W	Metal Oxide		AA
R8057	VRD-RA2EE181JY	V	180	1/4W	Carbon		AA
R8058	VRD-RA2EE181JY	V	180	1/4W	Carbon		AA
R8062	VRS-CY1JF000JY	V	0	1/16W	Metal Oxide		AA

SWITCHES

SW8051	QSW-K0003AJZZ+	V	Switch, Open/Close	AB
SW8052	QSW-K0003AJZZ+	V	Switch, Play	AB
SW8053	QSW-K0003AJZZ+	V	Switch, Stop	AB
SW8054	QSW-K0003AJZZ+	V	Switch, VCR/DVD	AB

MISCELLANEOUS PARTS

CN8052	QSOCN1095REZZ	V	Socket, 10Pin	AC
CN8053	QSOCN1595REZZ	V	Socket, 15Pin	AD
RMC8001	RRMCU0233CEZZ	V	Remote Receiver	AF

DUNTKB375TEV1 VCR OPERATION PWB UNIT

CAPACITORS

C8031	VCKYD41HB331KY	V	330p	50V	Ceramic		AA
C8032	VCKYD41HB331KY	V	330p	50V	Ceramic		AA

RESISTORS

R8011	VRS-CY1JF272JY	V	2.7k	1/16W	Metal Oxide		AA
R8012	VRS-CY1JF332JY	V	3.3k	1/16W	Metal Oxide		AA
R8014	VRS-CY1JF332JY	V	3.3k	1/16W	Metal Oxide		AA
R8015	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8016	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide		AA
R8017	VRS-CY1JF822JY	V	8.2k	1/16W	Metal Oxide		AA
R8019	VRS-CY1JF822JY	V	8.2k	1/16W	Metal Oxide		AA
R8022	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide		AA
R8023	VRD-RA2BE223JY	V	22k	1/8W	Carbon		AA
R8024	VRD-RA2BE563JY	V	56k	1/8W	Carbon		AA
R8026	VRS-CY1JF750JY	V	75	1/16W	Metal Oxide		AA

BALUN

FB8031	RBLN-0077TAZZY	V	Balun, BLN-0077TA	AB

SWITCHES

SW8055	QSW-K0003AJZZ+	V	Switch, Operate	AB
SW8056	QSW-K0003AJZZ+	V	Switch, Stop/Eject	AB
SW8057	QSW-K0003AJZZ+	V	Switch, CH-	AB
SW8058	QSW-K0003AJZZ+	V	Switch, REW	AB
SW8059	QSW-K0003AJZZ+	V	Switch, Play/x2	AB
SW8060	QSW-K0003AJZZ+	V	Switch, CH+	AB
SW8061	QSW-K0003AJZZ+	V	Switch, REC	AB

Ref. No.	Part No.	★	Description	Code

MISCELLANEOUS PARTS

CN8001	QSOCN0895REZZ	V	Socket, 8Pin	AC
J8001	QJAKE0190CEZZ	V	Jack, 3Pin	AE
J8002	QJAKE0257GEZZ	V	Jack, 3Pin	AE
J8003	QJAKE0180CEZZ	V	Jack, 3Pin	AE

DUNTKB376TEV1 POWER PWB UNIT

INTEGRATED CIRCUITS

IC903	VHiMM1431AT-1+	V	MM1431AT	AD
IC908	VHiPQ30RV11-1	V	PQ30RV11	AF
IC909	VHiPQ15RW11-1	V	PQ15RW11	AG
IC911	VHiKA7808AP-1	V	KA7808AP	AE

TRANSISTORS

⚠ Q901	VS2SK2848//-1	V	2SK2848		AH
Q902	VS2SC3576AC-1+	V	2SC3576AC		AC
Q904	VS2PD601AR/-1Y	V	2PD601AR		AB
Q933	VS2SB1443TV1E+	V	2SB1443TV, PC_10V SW		AE
Q934	VSKRC102S//-1Y	V	KRC102S		AA
Q935	VS2SB1443TV1E+	V	2SB1443TV, DVD_1.8V SW		AE
Q936	VSKRC102S//-1Y	V	KRC102S		AA
Q937	VS2SB1443TV1E+	V	2SB1443TV, DVD_3.3V SW		AE
Q938	VSKRC102S//-1Y	V	KRC102S		AA
Q939	VS2SA1271-Y-1+	V	2SA1271-Y, DVD D_5V SW		AC
Q940	VSKRC103S//-1Y	V	KRC103S		AA
Q941	VS2SA1271-Y-1+	V	2SA1271-Y, DVD PC_5V SW		AC
Q942	VSKRC103S//-1Y	V	KRC103S		AA

DIODES AND LED'S

⚠ D901	VHDRL1N4005-1Y	V	RL1N4005		AC
⚠ D902	VHDRL1N4005-1Y	V	RL1N4005		AC
⚠ D903	VHDRL1N4005-1Y	V	RL1N4005		AC
⚠ D904	VHDRL1N4005-1Y	V	RL1N4005		AC
⚠ D905	RH-EX0617GEZZY	V	Zener, 6.2A		AA
D907	VHD1SS119//-1Y	V	1SS119		AA
D909	RH-EX0646GEZZY	V	Zener, 15V		AA
D910	VHD10ELS4//-1Y	V	10ELS4		AD
D913	VHD1SS119//-1Y	V	1SS119		AA
D914	RH-EX0613GEZZY	V	Zener, 5.1V		AB
D921	VHDFR154GL+1E	V	FR154GL+		AC
D922	VHD15DF1FC/1E	V	15DF1FC		AD
D923	VHD15DF1FC/1E	V	15DF1FC		AD
D924	VHDSB240L++1E	V	SB240L++		AD
D926	RH-DX0436CEZZ	V	DX0436CE		AG
D929	VHD10ELS4//-1Y	V	10ELS4		AD
D931	VHD1SS119//-1Y	V	1SS119		AA
D932	VHD1SS119//-1Y	V	1SS119		AA
D933	VHD1SS119//-1Y	V	1SS119		AA
D934	VHD1SS119//-1Y	V	1SS119		AA
D935	VHD1SS119//-1Y	V	1SS119		AA
D936	RH-EX0649GEZZY	V	Zener		AB
D956	RH-EX0677GEZZY	V	Zener		AC
⚠ IC901	RH-FXA003WJZZ	V	FXA003WJ		AD
⚠ IC902	RH-FXA003WJZZ	V	FXA003WJ		AD

COILS AND TRANSFORMER

⚠ L901	RCiLF0275GEZZ	V	Coil, CiLF0275GE		AF
L922	RCiLP0147GEZZ+	V	Coil, 10µH		AC
L925	RCiLP0175CEZZ+	V	Coil, 22µH		AD
⚠ T901	RTRNWA050WJZZ	U	Transformer		AN

CAPACITORS

⚠ C901	RC-FZ082CGEZZ	V	0.1	250V	Film	AD
⚠ C902	RC-FZ082CGEZZ	V	0.1	250V	Film	AD
⚠ C903	RC-KZ0105GEZZ	V	2200p	250V	Ceramic	AD
⚠ C904	RC-EZ0437GEZZ	V	68	400V	Electrolytic	AK
⚠ C905	VCQYTA1HM222J+	V	2200p	50V	Mylar	AA
⚠ C909	VCQYTA1HM562K+	V	5600p	50V	Mylar	AB
⚠ C910	VCEA9M1HW475M+	V	4.7	50V	Electrolytic	AB
⚠ C911	RC-KZ0112CEZZ	V	100p	2kV	Ceramic	AB
⚠ C914	RC-KZ0102GEZZ	V	680p	250V	Ceramic	AE

Ref. No.	Part No.	★	Description			Code
DUNTKB376TEV1 POWER PWB UNIT(Continued)						
⚠ C915	RC-KZ0102GEZZ	V	680p	250V	Ceramic	AE
C921	VCEA0A1HW477M+	V	470	50V	Electrolytic	AD
C922	VCEA0A1EW108M+	V	1000	25V	Electrolytic	AD
C923	VCEA0A1CW108M+	V	1000	16V	Electrolytic	AD
C924	VCEA0A1AW108M+	V	1000	10V	Electrolytic	AC
C925	RC-EZ1075CEZZ	V	2200p	10V	Electrolytic	AF
C927	VCQYTA1HM104K+	V	0.1	50V	Mylar	AC
C928	VCQYTA1HM104K+	V	0.1	50V	Mylar	AC
C929	VCEA0A2AW106M+	V	10	100V	Electrolytic	AC
C932	VCEA0A1EW108M+	V	1000	25V	Electrolytic	AD
C935	VCEA0A1AW228M	V	2200	10V	Electrolytic	AD
C936	VCEA9M1HW105M+	V	1	50V	Electrolytic	AB
C937	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C938	VCEA9M1HW105M+	V	1	50V	Electrolytic	AB
C939	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C944	VCEA0A1HW107M+	V	100	50V	Electrolytic	AB
C945	VCEA9M1CW107M+	V	100	16V	Electrolytic	AB
C946	VCEA9M1HW225M+	V	2.2	50V	Electrolytic	AB
C948	VCEA9M0JW227M+	V	220	6.3V	Electrolytic	AB
C949	VCEA9M1HW105M+	V	1	50V	Electrolytic	AB
C950	VCEA9M0JW476M+	V	47	6.3V	Electrolytic	AB
C952	VCEA9M1CW226M+	V	22	16V	Electrolytic	AB
RESISTORS						
⚠ R901	VRD-RA2EE474JY	V	470k	1/4W	Carbon	AA
⚠ R902	RR-HZ0014GEZZY	V	12M	1W	Alumina Ceramic	AE
⚠ R903	VRS-CY1JF564JY	V	560k	1/16W	Metal Oxide	AA
⚠ R905	VRD-RM2HD222J	V	2.2k	1/2W	Carbon	AA
⚠ R907	VRD-RA2HD184J	V	180k	1/2W	Carbon	AA
⚠ R908	VRD-RA2HD184J	V	180k	1/2W	Carbon	AA
⚠ R910	VRN-VV3DB1R0J	V	1	2W	Metal Film	AB
R911	VRD-RA2BE273JY	V	27k	1/8W	Carbon	AA
R912	VRS-CY1JF223JY	V	22k	1/16W	Metal Oxide	AA
R914	VRS-CY1JF683JY	V	68k	1/16W	Metal Oxide	AA
R917	VRS-CY1JF223JY	V	22k	1/16W	Metal Oxide	AA
R919	VRS-CY1JF101JY	V	100	1/16W	Metal Oxide	AA
R921	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R923	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R924	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R925	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R926	VRD-RA2BE121JY	V	120	1/8W	Carbon	AA
R927	VRS-CY1JF332JY	V	3.3k	1/16W	Metal Oxide	AA
R928	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R929	VRS-CY1JF100JY	V	10	1/16W	Metal Oxide	AA
R931	VRS-CY1JF102JY	V	1k	1/16W	Metal Oxide	AA
R932	VRS-CY1JF562JY	V	5.6k	1/16W	Metal Oxide	AA
R933	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R934	VRD-RM2HD102JY	V	1k	1/2W	Carbon	AA
R935	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R936	VRD-RA2BE221JY	V	220	1/8W	Carbon	AA
R937	VRS-CY1JF103JY	V	10k	1/16W	Metal Oxide	AA
R938	VRD-RA2BE221JY	V	220	1/8W	Carbon	AA
R939	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R940	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R941	VRD-RA2BE103JY	V	10k	1/8W	Carbon	AA
R942	VRD-RA2BE102JY	V	1k	1/8W	Carbon	AA
R943	VRS-CY1JF683JY	V	68k	1/16W	Metal Oxide	AA
R944	VRS-CY1JF102FY	V	1k	1/16W	Metal Oxide	AA
R945	VRS-CY1JF222FY	V	2.2k	1/16W	Metal Oxide	AA
R946	VRS-CY1JF681FY	V	680	1/16W	Metal Oxide	AA
R947	VRS-CY1JF272FY	V	2.7k	1/16W	Metal Oxide	AA
R950	VRS-CY1JF222JY	V	2.2k	1/16W	Metal Oxide	AA
R952	VRD-RA2BE222JY	V	2.2k	1/8W	Carbon	AA
R956	VRS-CY1JF472JY	V	4.7k	1/16W	Metal Oxide	AA
R957	VRS-CY1JF104JY	V	100k	1/16W	Metal Oxide	AA
BALUNES						
⚠ FB901	RBLN-0090GEZZY	V	Balun, BLN-0090GE			AB
FB921	RBLN-0090GEZZY	V	Balun, BLN-0090GE			AB
FB922	RBLN-0090GEZZY	V	Balun, BLN-0090GE			AB

Ref. No.	Part No.	★	Description	Code
MISCELLANEOUS PARTS				
CN201	QPLGN0978GEZZ	V	Plug, 9Pin	AC
⚠ F901	QFS-C2025CEZZ	V	Fuse, 250V/2A	AD
⚠ FH901	QFSHD1017CEZZ+	V	Fuse Holder	AC
⚠ FH902	QFSHD1018CEZZ+	V	Fuse Holder	AC
P901	QPLGN0269GEZZ	V	Plug, 2Pin	AB
P902	QPLGN1278GEZZ	V	Plug, 12Pin	AC
⚠ W901	PRDAF5021AJFW	V	Heat Sink, Q901	AE
⚠ W902	XBPSD30P10KS0	V	Screw	AA
W908	PRDAR0083PEFW	V	Heat Sink, IC908	AD
W909	XBPSD30P10KS0	V	Screw	AA

MECHANISM PARTS (DVD PART)

401	CMECD0211HJV2	V	Mecha Chasis Ass'y	BS
401-1	LX-BZ3189GEZZ	V	Guide Axis Pressing Screw, x4	AB
401-2	NGERH1330AJZZ	V	Relay Gear1	AC
401-3	NGERH1341AJ00	V	Relay Gear2	AC
401-4	LX-WZ1030GE00	V	Relay Gear Washer	AA
401-5	LX-BZ3163GEFN	V	Motor Screw, x2	AC
401-6	QSW-M0066AJZZ	V	In SW	AD
401-7	DUNTKB233TEV1	–	Sled Motor PWB Unit	—
401-8	RMOTV2022AJZZ	V	Sled Motor	AK
401-9	NGERH1333AJZZ	V	Sled Motor Gear	AB
401-10	NGERR1021AJZZ	V	Double Action Rack	AC
401-11	MSPRC0244AJZZ	V	Rack Spring	AB
401-12	NGERR1024AJZZ	V	Rack	AC
401-13	LX-HZ0083TAFF	V	Rack Fixing Screw	AA
401-14	QPLGN0680GEZZ	V	Plug	AB
409	PCUSG0126AJZZ	V	Insulator, x4	AD
410	LX-HZ3117AJZZ	V	Traverse Fixing Screw, x6	AC
413	QCNW-8552AJZZ	V	Sled Wire	AF
418	QCNW-A362WJZZ	V	Pickup Relay FFC	AD
419	MSLiP0014AJZZ	V	Slide Rack	AD
420	LHLDZ2144AJZZ	V	Traverse Holder	AD
421	QCNW-8375AJZZ	V	Loading Wire	AD
422	LHLDW1033CE00	V	Nylon Band Holder	AA
423	RMOTM1097AJZZ	V	Loading Motor	AM
424	NPLYM0001AJZZ	V	Loading Motor Pulley	AB
425	QSW-B0011AJZZ	V	Loading Motor Switch	AE
426	NBLTK0068AJZZ	V	Loading Belt	AD
427	NGERH1332AJZZ	V	Pulley Gear	AC
428	NGERP1016AJZZ	V	Tray Pinion	AC
429	LCHSMA001WJZZ	V	Base Chassis	AL
431	LCRA-0012GEZZ	V	Disc Clamper	AF
432	LX-WZ0102GEFD	V	York Washer	AB
433	PMAGS1001GEZZ	V	Clamper Magnet	AF
434	GCOVA2164AJZZ	V	Tray	AH
435	LX-BZ3434AJFD	V	Loading Motor Fixing Screw, x2	AB

MECHANISM PARTS (VCR PART)

Ref. No.	Part No.	★	Description	Code
501	LBNDK1021AJZZ	V	Tension Band Ass'y	AC
502	LBOSZ1022AJZZ	V	Tension Arm Boss	AB
504	LBOSZ1006AJZZ	V	Cassette Stay L	AD
505	LCHSM0186AJZZ	V	Main Chassis Ass'y	AQ
506	LHLDZA049WJZZ	V	Loading Motor Block	AD
507	LPOLM0085GEZZ	V	Supply Pole Base Ass'y	AF
508	LPOLM0086GEZZ	V	Take-up Pole Base Ass'y	AF
509	MLEVF0544AJZZ	V	Tension Arm Ass'y	AE
510	MARMP0061AJZZ	V	Take-up Loading Arm	AC
511	MARMP0062AJZZ	V	Supply Loading Arm	AC
512	MLEVF0545GEZZ	V	Pinch Roller Lever Ass'y	AM
513	NBRGP0031AJZZ	V	Pinch Guide Bearing	AB
516	LANGFA008WJFW	V	A/C Head Plate	AD
517	LHLDW1895AJZZ	V	A/C Head FFC Holder	AB
518	MLEVP0347AJZZ	V	Pinch Double Action Lever	AC
519	MLEVP0344AJZZ	V	Reverse Guide Lever Ass'y	AE
520	MLEVP0342AJZZ	V	Take-up Loading Link	AB
521	MLEVP0343AJZZ	V	Supply Loading Link	AB
523	MLEVP0346AJZZ	V	Clutch Lever	AC
524	MLEVP0348AJZZ	V	Supply Main Brake	AB
525	MLEVP0349AJZZ	V	Take-up Main Brake Ass'y	AC
527	MSLiP0016AJZZ	V	Sifter	AD
528	MSPRDA006WJFJ	V	Reverse Guide Spring	AB
529	MSPRD0213AJFJ	V	Take-up Loading Double Action Spring	AB
530	MSPRD0214AJFJ	V	Supply Loading Double Action Spring	AB
531	MSPRT0439AJFJ	V	Pinch Double Action Spring	AB
532	MSPRT0438AJFJ	V	Main Brake Spring	AB
533	MSPRT0416AJFJ	V	Tension Spring	AD
534	NBLTK0069AJ00	V	H-Reel Belt	AC
535	NDAiV1093AJ00	V	Reel Disc, x2	AC
536	NGERH1342AJZZ	V	Loading Connect Gear	AB
537	NGERH1344AJZZ	V	Master Cam	AD
538	NGERH1343AJZZ	V	Synchro Gear	AB
541	NGERH1345AJZZ	V	Pinch Drive Cam	AC
543	NGERH1299AJZZ	V	Reel Relay Gear, x2	AE
544	NGERW1081AJZZ	V	Worm Gear	AB
545	NGERW1082AJZZ	V	Worm Wheel Gear	AC
546	NiDR-0036AJZZ	V	Idler Ass'y	AD
548	NPLYV0173AJZZ	V	Limitter Pulley Ass'y	AF
549	NROLP0131GEZZ	V	Guide Roller, x2	AL
551	MSPRC0217AJFJ	V	Guide Roller Spring, x2	AC
552	PREFL1025AJZZ	V	Light Guide	AC
553	QCNW-A245WJZZ	V	FFC for Drum Motor	AE
555	QCNW-A247WJZZ	V	FFC for A/C Head	AD
556	QPWBFB112WJZZ	V	A/C Head PWB	AC
558	RHEDTA001WJZZ	V	Full Erase Head	AH
559	RHEDUA002WJZZ	V	A/C Head Ass'y	AP
560	RMOTMA001WJZZ	V	Loading Motor	AK
561	RMOTNA001WJZZ	V	Capstan Motor	AX
562	RMOTP1139GEZZ	V	Drum Drive Motor	AT
563	DDRMW0043TEX2	V	Upper and Lower Drum Ass'y	BH
564	QCNW-A244WJZZ	V	Loading Motor Wire	AB
565	QBRSK0041GEZZ	V	Drum Earth Brush Ass'y	AD
566	XBPSD26P04500	V	Screw 2.6P+4.5S(D/M), x6	AB
567	PGiDM0187AJZZ	V	Open Guide	AC
570	MSPRC0228AJFJ	V	Azimuth Spring	AB
571	MSPRC0224AJFJ	V	Height Adjusting Spring	AC
572	LHLDW1894AJZZ	V	R/T FFC Holder	AB
573	MLEVP0355AJZZ	V	H-Auto Head Cleaner Ass'y	AC
574	MSPRC0213AJFJ	V	Earth Spring	AC

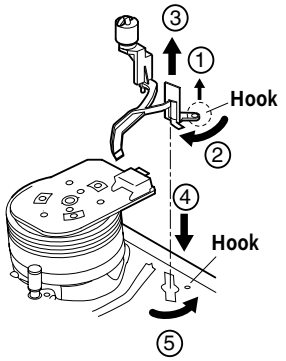
SCREW, NUTS AND WASHERS

Ref. No.	Part No.	★	Description	Code
201	XBPSD26P08000	V	A/C Head Screw 2.6P+8S	AA
202	LX-BZ3096GEFD	V	Tilt Adjusting Screw	AA
203	LX-HZ3082GEZZ	V	Screw WSW 2.6+6(AC)	AD
204	XJPSD26P06000	V	Screw 2.6+6S(CAPST), x3	AA
205	LX-RZ3015GEFJ	V	CS Washer, x2	AB
208	XRESJ30-06000	V	E-Ring(E-3)	AA
209	XWHJZ31-03052	V	Washer W3.1 P-5.2-0.3, x2	AC
210	XWHJZ31-04052	V	Washer W3.1 P-5.2-0.4, x2	AC
211	XWHJZ31-05052	V	Washer W3.1 P-5.2-0.5, x2	AC
212	XWHJZ31-06052	V	Washer W3.1 P-5.2-0.6, x2	AC
213	XWHJZ31-07052	V	Washer W3.1 P-5.2-0.7, x2	AC
214	XWHJZ31-08052	V	Washer W3.1 P-5.2-0.8, x2	AC
215	XHPSD26P05WS0	V	Loading Motor Block Screw	AC
216	LX-WZ1041GE00	V	Washer CW 2-6-0.5	AA
219	LX-WZ1098GE00	V	Washer CW 2.6-4.7-0.5	AB
221	XBPSD26P06000	V	Azimuth Adjusting Screw	AA
222	XBPSD26P14000	V	A/C Head Screw	AA
224	XBPSD30P06000	V	Screw 3P+6S(DRM FIX), x3	AA

CASSETTE HOUSING CONTROL PARTS

Ref. No.	Part No.	★	Description	Code
300	CHLDX3083TEV1	V	Cassette Housing Control Ass'y	AP
301	LANGF9661AJFW	V	Upper Plate	AD
302	LHLDX1049AJ00	V	Frame (L)	AD
303	LHLDX1050AJ00	V	Frame (R)	AE
304	LHLDX1051AJZZ	V	Holder (L)	AC
305	LHLDX1052AJZZ	V	Holder (R)	AC
306	MARMP0063AJZZ	V	Drive Arm L	AB
307	MARMP0064AJZZ	V	Drive Arm R	AC
308	MLEVP0350AJZZ	V	Drive Lever	AD
309	MLEVP0351AJZZ	V	Proof Lever	AC
310	MLEVP0352AJ00	V	Sensor Plate	AB
311	MLEVP0353AJ00	V	Open Lever	AB
312	MSLiF0079AJFW	V	Slider	AD
313	MSPRD0212AJFJ	V	Drive Arm Spring	AB
314	MSPRP0175AJFJ	V	Cassette Spring, x2	AE
315	MSPRD0215AJFJ	V	Proof Lever Spring	AB
317	NSFTD0065AJFD	V	Main Shaft	AD

• Replacing the AHC (Auto Head Cleaner)



• How to remove
Turn the H-AHC ass'y in the direction of (2), lifting the hook of the H-AHC ass'y in the direction of (1). When the hook is undone, pull out the H-AHC ass'y in the direction of (3).
• How to install
Insert the H-AHC ass'y into the hole on the chassis in the direction of (4) and turn it in the direction of (5). Check that the chassis hook and hook of the H-AHC ass'y are engaged.

* Caution when replacing
• Do not allow the AHC ass'y to contact with the drum.
• Do not contaminate the cleaner section of the AHC ass'y with grease, etc.

CABINET PARTS

Ref. No.	Part No.	★	Description	Code
2	CCABAA093TEV1	U	Top Cabinet Ass'y	
21	TLABM0167UMZZ	U	Model Label	
23	DUNTKB372TEV1	–	Terminal PWB Unit	—
24	DUNTKB374TEV1	–	DVD Operation PWB Unit	—
25	DUNTKB375TEV1	–	VCR Operation PWB Unit	—
26	DUNTKB376TEV1	–	Power PWB Unit	—
27	DUNTKB209TE6H	–	DVD Main PWB Unit	—
28	DUNTKB210TEV4	–	VCR Main PWB Unit (NC70H)	—
28	DUNTKB210TEV5	–	VCR Main PWB Unit (NC65H)	—
28	DUNTKB210TEV7	–	VCR Main PWB Unit (NC65S)	—
29	GBDYUA007WJFW	V	Bottom Plate	AM
30	GCABB1254AJNZ	V	Main Frame	AS
31	GCOVAA099WJZZ	U	Antenna Terminal Cover	
32	LANGF9654AJFW	V	DVD REINF. Angle	AC
33	LANGF9662AJFW	V	Angle(DVD)	AE
34	LHLDW1072GEZZ	V	Wire Holder	AA
35	LHLDW1151AJZZ	V	Edge Holder	AC
38	PGUMS0026AJZZ	V	Foot Rubber, x2	AB
40	PSLDM4595AJFW	V	DVD Shield(lower)	AD
41	TLABSA005WJZZ	V	L-Caution Label	AB
42	QCNW-A692WJZZ	V	Connecting Cord	AF
43	QCNW-A762WJZZ	U	Connecting Cord	
44	QCNW-A358WJZZ	V	Connecting Cord	AD
45	QCNW-A765WJZZ	V	Connecting Cord	AE
46	QCNW-A360WJZZ	V	Connecting Cord	AC
47	QCNW-A361WJZZ	V	Connecting Cord	AG
48	QCNW-A401WJZZ	V	Connecting Cord(PWR-VCR)	AG
49	QCNW-A596WJZZ	U	Connecting Cord, x2	
50	QCNW-A597WJZZ	U	Connecting Cord	
51	QCNW-A598WJZZ	U	Connecting Cord	
55	HDECQA032WJSA	V	Tray Decoration Cover (NC65H/S)	AF
55	HDECQA032WJSC	U	Tray Decoration Cover (NC70H)	
58	QCNW-A362WJZZ	V	Pickup Relay FFC	AD
60	PSPAZA074WJZZ	U	Spacer	
61	QEARPA017WJFW	U	RCA Shield	
62	GCOVAA146WJZZ	U	Rear Panel (NC70H)	
62	GCOVAA147WJZZ	U	Rear Panel (NC65H/S)	
63	QEARPA046WJFW	U	Earth Plate	
64	LHLDZA052WJZZ	U	Rear PWB Holder	
70	PSPAZA031WJZZ	V	DVD Spacer	AD
⚠ 71	QACCV2009AJZZ	V	AC Cord(NC65S)	AM
⚠ 71	QACCB5014UMZZ	U	AC Cord(NC65H/70H)	
a	LX-HZ3087GEFN	V	Screw for Mecha/Ant.	AB
b	LX-HZ3099GEFD	V	Screw for DVD Main, x4	AB
c	XEBSD30P12000	V	Screw for DVD/Mecha, x20	AA
d	XEPSD30P14XS0	V	Screw for Mecha&Ant, x2	AB
e	XEPSF30P12000	V	Screw for Rear Panel, x6 (NC65H/S)	AA
e	XEPSF30P12000	V	Screw for Rear Panel, x7 (NC70H)	AA
f	XHPSD26P06WS0	V	Screw for Casssete Control, x2	AA
g	XHPSD30P06WS0	V	Screw for VTR Main/BTM	AA
h	XHPSF30P10WS0	V	Screw, x3	AA
i	LX-HZ3096GEZZ	V	Screw for Top Cab, x7	AB
j	XEPSD30P14XS0	V	Screw for Mecha/PNL, x4	AB
k	XEBSD30P12000	V	Screw for Earth Plate	AA

FRONT PANEL PARTS

Ref. No.	Part No.	★	Description	Code
600	CPNLCA044TEV1	U	Front Panel Ass'y (NC70H)	
600	CPNLCA044TEV2	U	Front Panel Ass'y (NC65H)	
600	CPNLCA044TEV5	U	Front Panel Ass'y (NC65S)	
600-A	CBTN-3177TEV2	U	Selector Button Ass'y	
600-1	HDECQA033WJSA	V	Selector Button Dec.	AE
600-2	HDECQA011WJSA	V	Ring Dec.	AE
600-3	JBTN-3177AJSA	V	Selector Button	AD
600-4	PSHEPA001WJZZ	V	DEF Sheet	AC
600-5	HDECQ2321AJSA	V	LED Cover	AC
600-6	HDECQA072WJSA	U	Cassette Flap(NC65H)	
600-6	HDECQA072WJSB	U	Cassette Flap(NC70H)	
600-6	HDECQA093WJSA	U	Cassette Flap(NC65S)	
600-7	HDECQA070WJSB	U	Front Dec.(NC70H)	
600-7	HDECQA098WJSA	U	Front Dec.(NC65H/S)	
600-8	HDECQA031WJSA	V	Window Dec.	AH
600-9	HiNDPA041WJSA	V	Indicator(VCR)	AC
600-10	HiNDPA042WJSA	V	Indicator(DVD)	AD
600-11	JBTN-A017WJSA	V	VCR Mode Button (NC65H/S)	AE
600-11	JBTN-A017WJSC	U	VCR Mode Button (NC70H)	
600-12	JBTN-3175AJSA	V	DVD Mode Button (NC65H/S)	AE
600-12	JBTN-3175AJSD	U	DVD Mode Button (NC70H)	
600-13	MSPRD0105AJFJ	V	Cassette Flap Spring	AB
600-14	PGUMS0042AJZZ	V	Spacer	AA

SUPPLIED ACCESSORIES

	QCNW-7870UMZZ	V	RF Cable	AH
	QCNW-8077UMZZ	V	21 Pin Cable	AU
	RRMCGA054WJSA	U	Remote Control Unit (NC70H)	AW
	RRMCGA055WJSA	U	Remote Control Unit (NC65S)	AW
	RRMCGA069WJSA	U	Remote Control Unit (NC65H)	AW
	TiNS-A220WJZZ	U	Operation Manual(NC70H)	AS
	TiNS-A221WJZZ	U	Operation Manual(NC70H)	AC
	TiNS-A222WJZZ	U	Operation Manual(NC65H)	AS
	TiNS-A223WJZZ	U	Operation Manual(NC65H)	AC
	TiNS-A268WJZZ	U	Operation Manual(NC65S)	AS
	TiNS-A269WJZZ	U	Operation Manual(NC65S)	AC

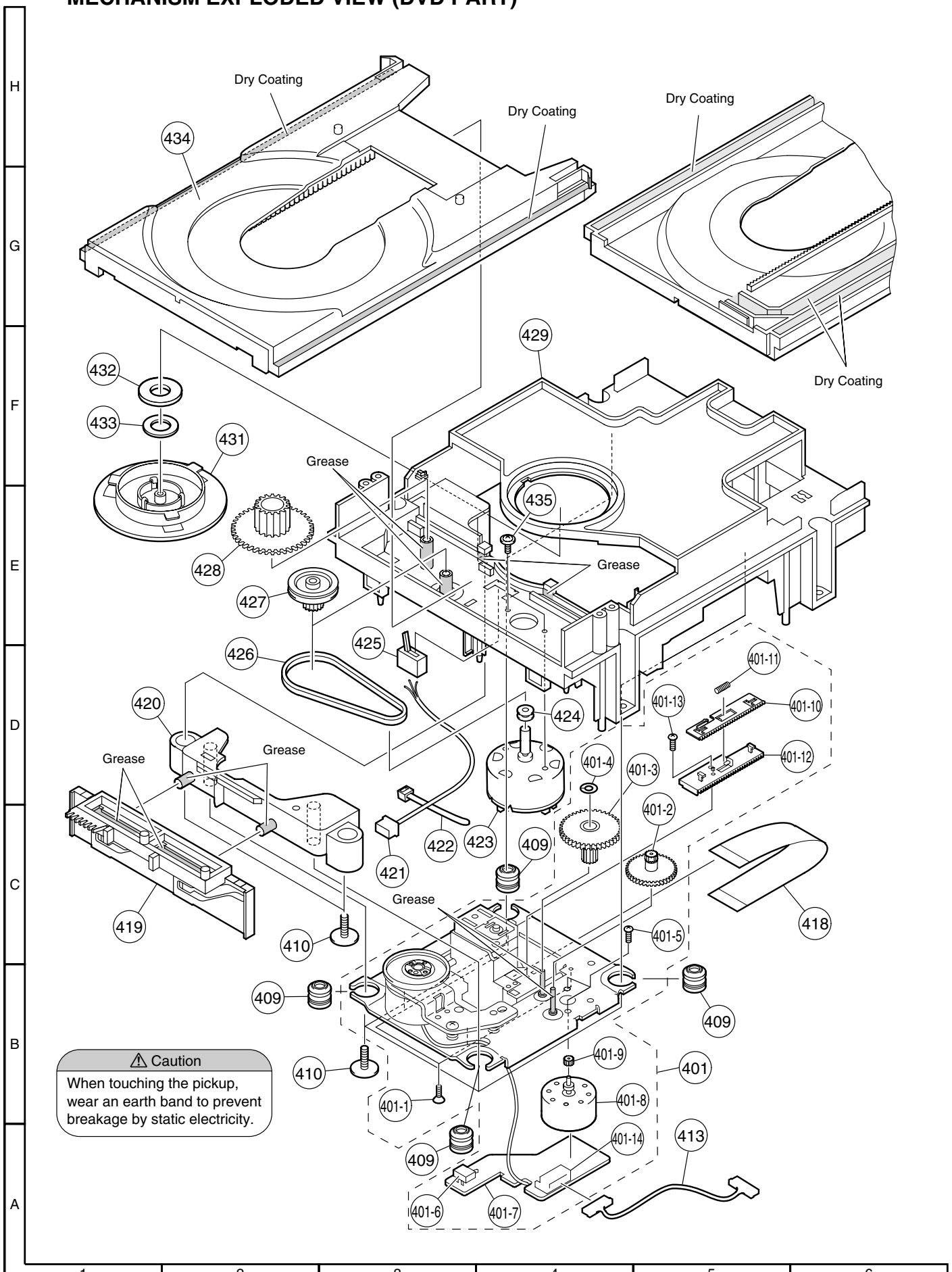
ACCESSORY
(NOT REPLACEMENT ITEM)

	TGAN-3170UMZZ	–	Guarantee Card	—

PACKING PARTS
(NOT REPLACEMENT ITEM)

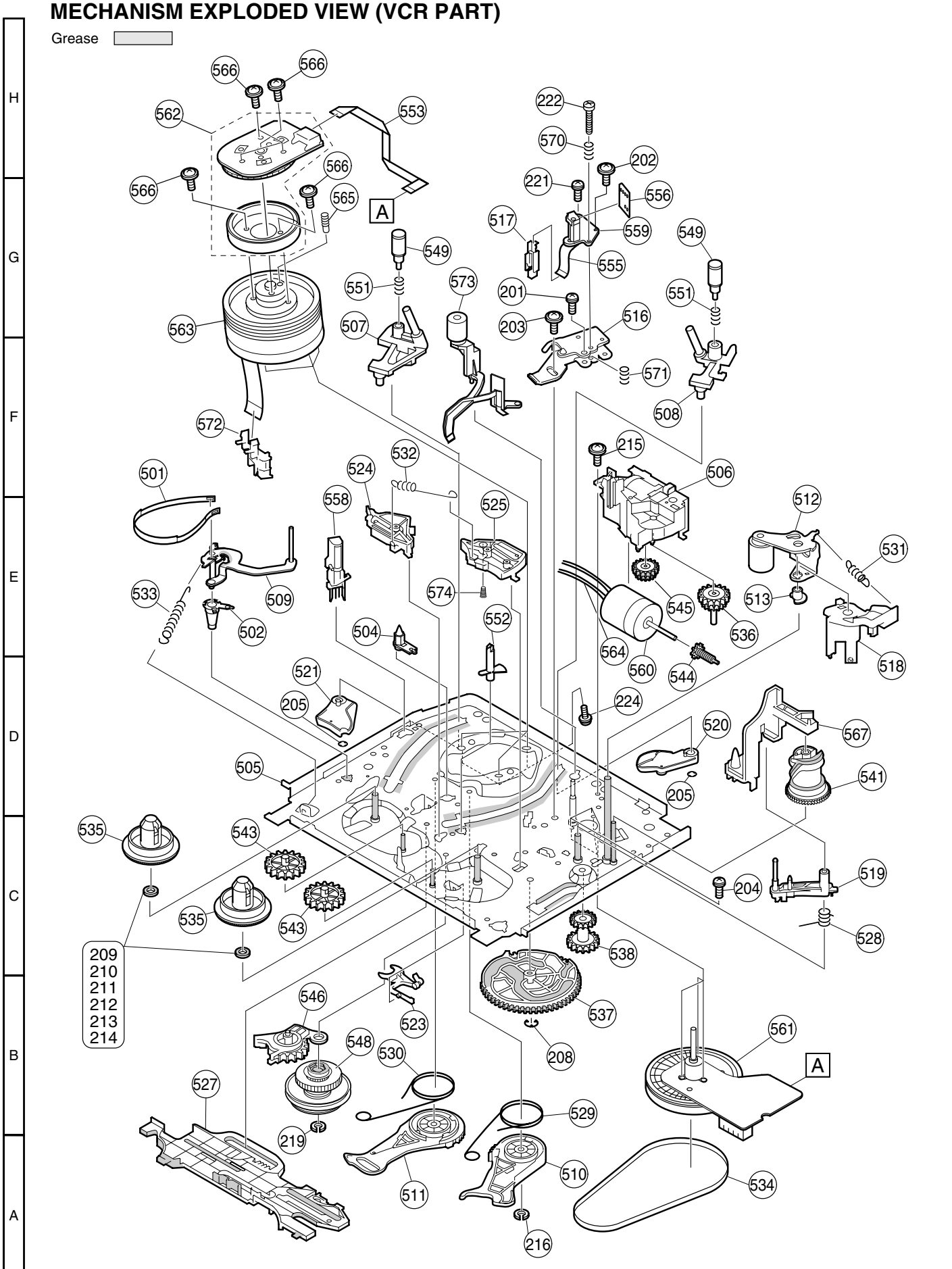
	SPAKCA168WJZZ	–	Packing Case (NC70H)	—
	SPAKCA169WJZZ	–	Packing Case (NC65H/S)	—
	SPAKP0002UMZZ	–	Wrapping Paper	—
	SPAKX1144UMZZ	–	Packing Add. (Front)	—
	SPAKX1146UMZZ	–	Packing Add. (Rear)	—
	TLABK0016UMZZ	–	Label	—

MECHANISM EXPLODED VIEW (DVD PART)



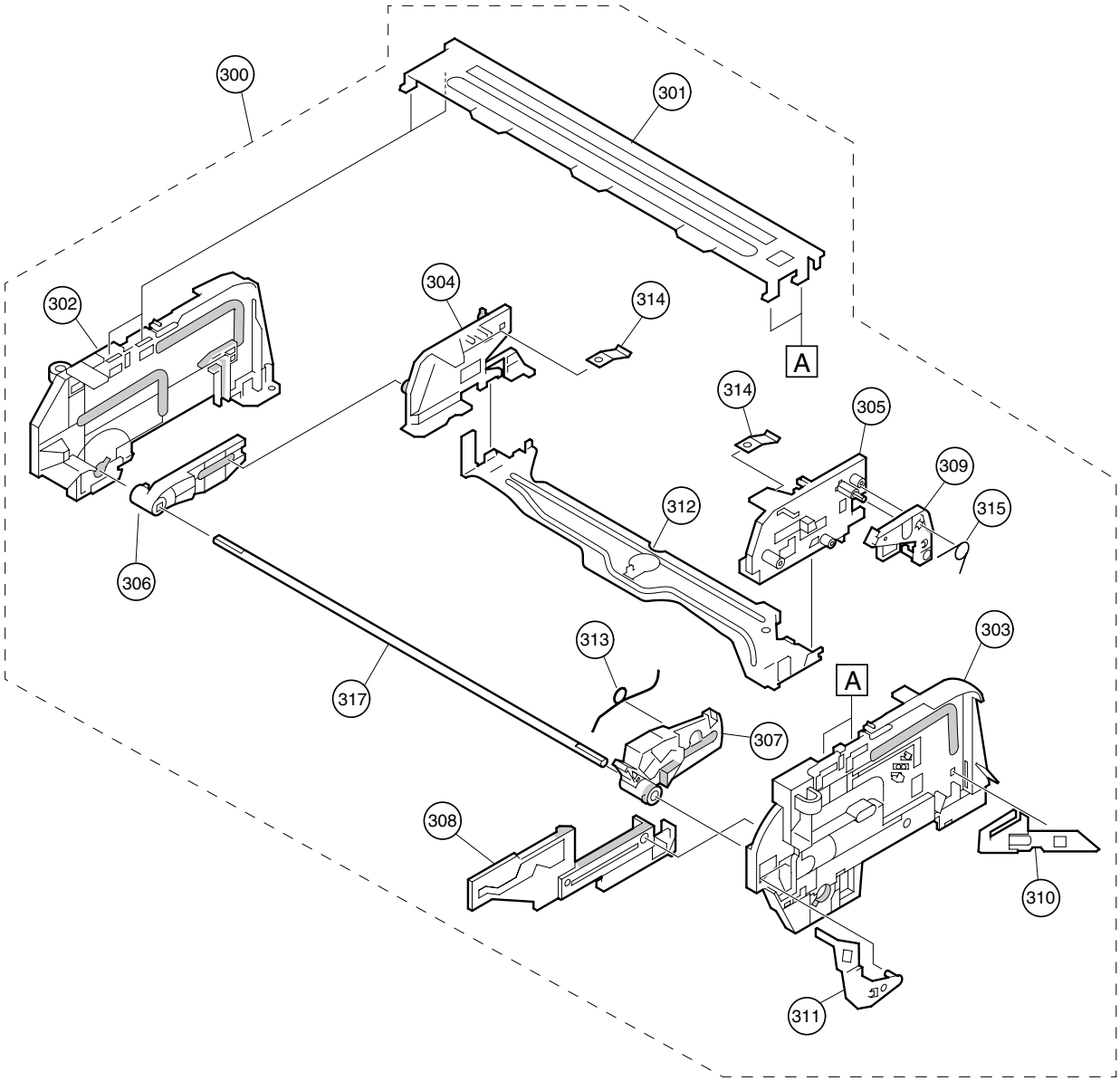
MECHANISM EXPLODED VIEW (VCR PART)

Grease

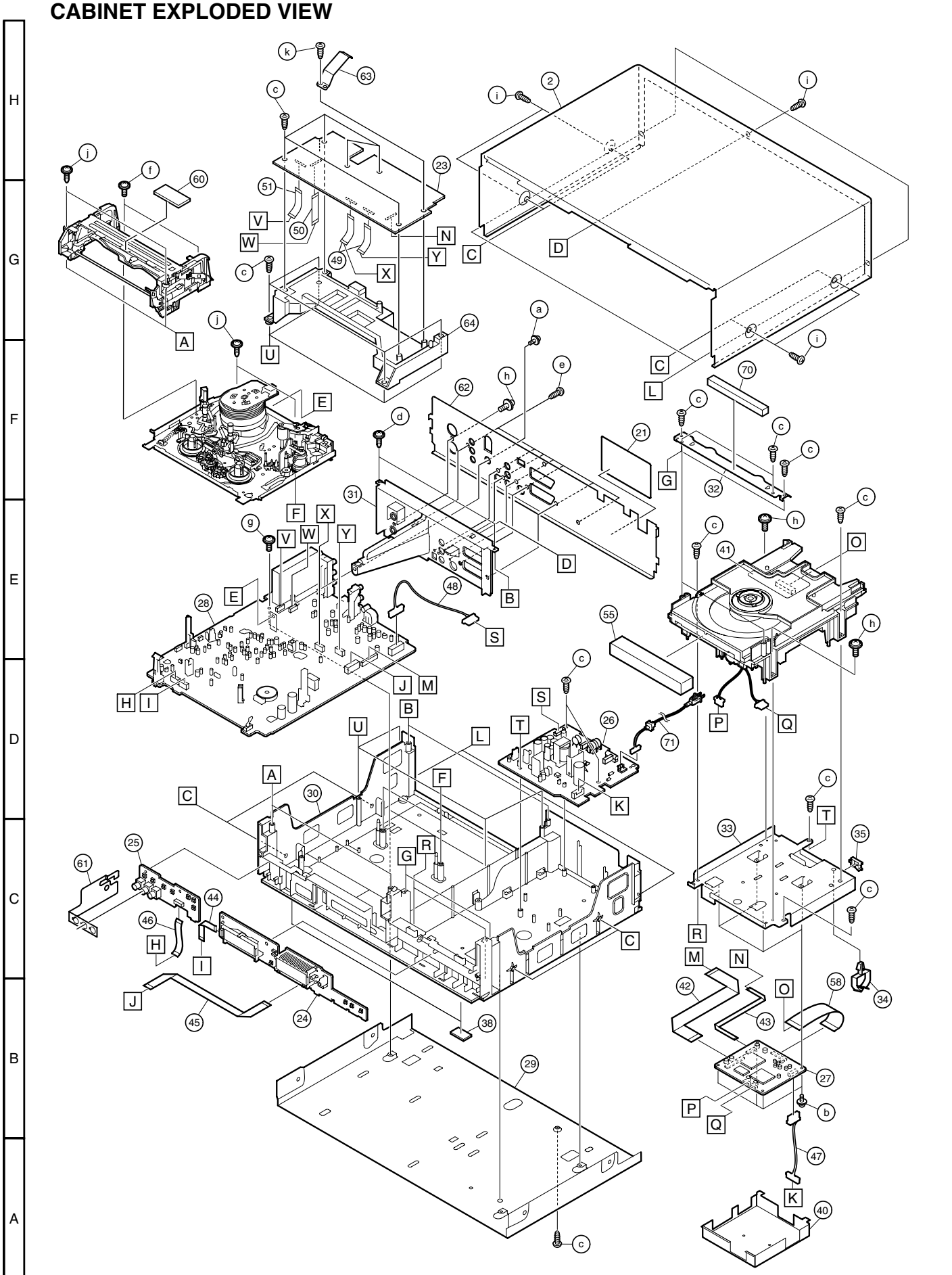


CASSETTE HOUSING CONTROL EXPLODED VIEW

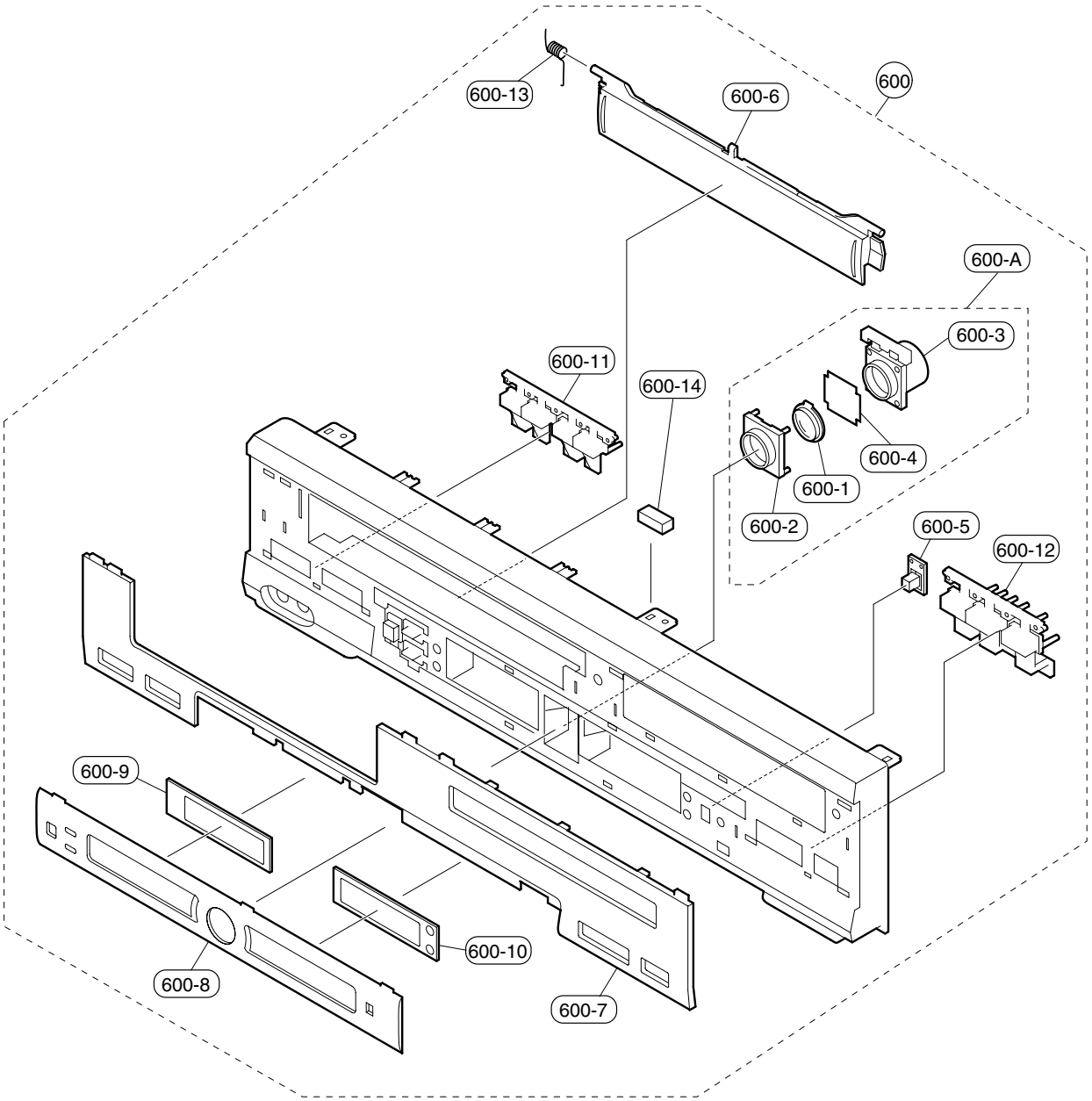
Grease



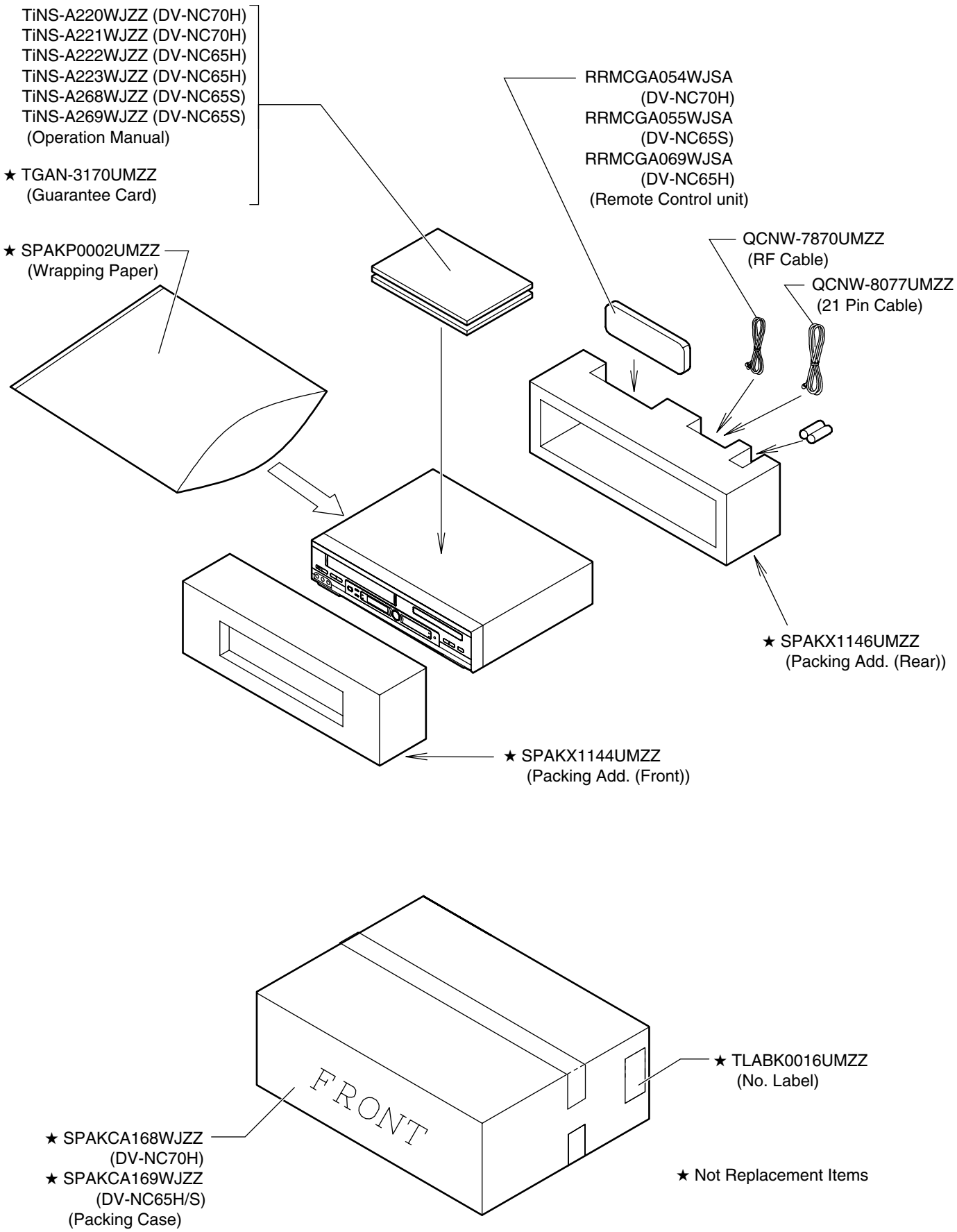
CABINET EXPLODED VIEW



FRONT PANEL EXPLODED VIEW



16. PACKING OF THE SET



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ⒹJapan ⓅSMM TQ1376-S
Sep. 2002 Printed in JAPAN
SA. DS(NR)

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